APPENDIX E HTRW PRELIMINARY ASSESSMENT SCREENING

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Introduction

This appendix contains Preliminary Assessment Screening (PAS) surveys for the proposed Corps of Engineer's Least Cost Disposal Alternative and the Sponsor's Preferred Disposal Alternative, as well as wildlife mitigation sites. Seven sites were not evaluated, including three upland disposal sites (W-96.5, W-95.7, and W-44.0, Puget Island Vjk Property) and four mitigation sites (Joslin at WRM 2.5, Puget Island W-44.0, Webb at CRM 47.0, and Svenson at CRM 24). Those sites will be evaluated in the pre-construction, engineering, and design (PED) phase of the project. Of the sites evaluated to date, several had significant hazardous, toxic and radioactive waste (HTRW) issues that will require resolution prior to use for the project.

The PAS reports summarize the condition of upland disposal and mitigation sites, evaluate their potential for contamination based on current and past uses, and adjacent land uses. The PAS is an assessment to determine the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The PAS is used to identify sites that may represent potential CERCLA liability, and screen out sites that pose an unacceptable risk relative to the potential beneficial use as a disposal or mitigation site. These reports represent site conditions at the time of evaluation and would require updating if the sites are proposed for acquisition.

PAS reports are completed for sites even if they have been or are currently being used for dredged material disposal in the past. The requirement to evaluate project lands for potential contamination from anthropogenic sources is a recent requirement. Previously used upland disposal site soils are generally presumed to be uncontaminated unless land uses altered site conditions. Previous dredged material was coarse grained and not likely to bear contamination from upriver contaminant sources as discussed in the sediment contaminant section.

Reach 1 Sites

O-105.0 Hayden Island, Portland, Oregon

Completed by Michael Gross, 17 March 1995, revised 30 October 1996

Recommendations. No evidence of hazardous waste remains. Use of property for dredged material under current conditions acceptable.

Regulatory Records. Date(s) of records search 17 November 1995.

- A. Environmental Protection Agency (EPA): EPA CERCLIS/NPL. EPA has evaluated 34 sites in Portland within 5 miles of the Hayden Island site and placed two on the NPL. Those two are McCormick and Baxter on the Willamette River five miles away, and the St. Johns Landfill two miles away near Smith Lake. Neither of these sites is expected to affect work at the Hayden Island disposal site. One of the CERCLIS sites was the Hayden Island Drum, which was a cleanup of a drum found in the Columbia River. No residual contamination remains from that work.
- B. Oregon Department of Environmental Quality (ODEQ): 1. Oregon Environmental Cleanup Site Information System. There are 63 sites in zip codes 97203 and 97217 with suspected contamination. Of those sites, three are on Hayden Island. The Milwaukie Dumping Area (Site 77) is Union Pacific Railroad property on which water with <1% pentachlorophenol was disposed between 10-25 years ago. The water came from McCormick and Baxter Creosoting, a site at the east end of the Willamette River railroad bridge which is now a Superfund site. EPA investigated the dump site and could not locate the area of dumping or any pentachlorophenol contamination. EPA and the state of Oregon do not plan any further investigations. The site may be at the railroad berm, which was a trestle until dredged material was placed around the trestle in 1968. One other site is called Hayden Island Drum, which is a response, by the Coast Guard to remove a drum in the Columbia River. This work was done without any known contamination.

The third site is called the Hayden Island Landfill. ODEQ proposes to place this on the Confirmed Release List. Hayden Island Landfill is an unlined covered fill used between 1950 and the 1970s located under an area currently covered by the trailer park, Jantzen Beach Center parking lot and the former ARCO gas station at 1305 N Hayden Island Drive. The site has not been investigated, but was discovered during cleanup of leaking tanks at the ARCO station. This investigation discovered debris and levels of five metals in groundwater well in excess of the MCL for drinking water. No groundwater is used on site, but there is a concern for migration to the river. ODEQ plans to investigate the nature and extent of contamination at the site. This site is approximately one half mile from the east end of the proposed disposal site. ODEQ has been contacted regarding these sites. None of these sites are expected to adversely affect disposal of dredged material at the disposal site.

- 2. <u>Oregon UST Facilities List</u>. In zip codes 97203 and 97217, there are 276 active underground storage tanks. Several are on Hayden Island, but all those are on the east side of the railroad crossing bisecting the island.
- 3. Oregon UST Cleanup List. There are 70 sites in zip codes 97203 and 97217 where leaking underground storage tank problems have not been resolved. Sixteen of those sites are close to or on Hayden Island. The bulk of the sites are in the Rivergate area near Terminal 4 or at the Peninsula Drainage District No. 1 area along Marine Drive and Suttle Road. There are three sites on Hayden Island itself, all in the Jantzen Beach area near Interstate 5 (I-5). One site just west of I-5, Hillman Properties, has confirmed groundwater gasoline contamination, which has not been cleaned up because of the discovery of a landfill beneath the site.

C. Washington Department of Ecology: Not applicable. Washington sites are hydraulically separated by the Columbia River.

Hazardous Materials Field Examination. Date of inspection 21 November 1995.

I. GENERAL PHYSICAL DATA

A. Description: This site is owned by the Port of Portland and is zoned for farm and open space use. Rezoning and city annexation will be required for future development. The site is the west end of Hayden Island totaling 780 acres, of which 569 are slated for development. The eastern portion of the site is scheduled to receive fill from the project, but much of the site will be filled. The port will distribute fill from this site to the rest of the development. The eastern boundary of the designate site is the Burlington Northern Railroad on an elevated track.

This site is the west half of a river terrace island currently in use for ranching. A heavy equipment school occupied a portion of the site at the time of the site visit, but has since been relocated off the site. Most of the site is cottonwood forest. The cleared 79-acre area designated to be used as a disposal site for the first part of this project has been used as pastureland from prior to 1940 until the present. An additional amount of open and woodland area will be used for a total disposal footprint of 208 acres. A small farm operated from buildings located on the north shore. Some of these buildings remain on site. The site has remained relatively unchanged during the years of farm operation. One wetland east of the cleared area was filled in the 1970s. The north shore of Hayden Island has been used continuously as a dredged material disposal site and has been built up 20 feet over the years. Dredged filling inland occurred in the early 1990s. Since then, the site has been used as a training area for a heavy equipment operating school. The potential for contamination at the farm site and by the training operations has been evaluated by the Port of Portland when the use was terminated. Equipment fueling and maintenance occurred at the school on site. Above ground tank trucks were used for fueling. Two tanks were seen on site. No underground storage tanks were evident at the 21 November 1995 site visit. Aerial photographs dating from 1940 to the present were reviewed. The Port of Portland's draft West Hayden Island Development Program report was also reviewed.

- **B. Structures:** Two buildings remain on site from a 1940s era farm, the house and one small equipment shed. Lead based paint and asbestos siding may be associated with these structures. Natural ponds are in several locations on the site. Two tank truck trailers were seen on the site, which may contain fuel.
- C. Topography and Aspect: The area is essentially flat, but placement of dredged material has caused mounding up to 30 feet in some areas. Several pile and rock dikes on the south side of the island are up to 30 feet above sea level. The site is about 10 to 15 feet above sea level. The site is an elongated east to west tending river bar island.
- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** A major high voltage powerline crosses the site from north to south midway through the proposed development area. A smaller line owned by Portland General Electric (PGE) traverses the site east to west along the southern portion of the site. No transformers are associated with either line. A substation for the PGE line is at the extreme east edge of the site at the railroad line.
- E. Access (roads, trails, other): Access is from Hayden Island Drive, west from the Jantzen Beach Center and under the railroad line. Gravel and dirt tracks currently traverse much of the site.
- F. Mining Activity: Dredged material placed on site is occasionally mined for use as fill.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: One drum which was found on site has been removed by the Coast Guard.
- **B.** Grazing/Logging Activities: A portion of the site is leased for beef cattle grazing. No facilities other than fencing are on site. Some wetlands and ponds are degraded by this use, but no hazards are anticipated. Groundwater beneath the island is not used.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Only in areas of heavy cattle use is vegetation stressed.
- **D.** Commercial Activity/Occupancy: Since the truck driver training school has moved from the site, there are no commercial activities.
- E. Unusual Seepage: None observed
- **F.** Solid Waste: There is evidence that dredged material has been disposed on site in the past near the entrance road to the aluminum plant.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: Only those associated with overgrazing.
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): The truck training facility used above ground storage. A site visit would verify whether the two tanks have been removed.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): No known usage.
- N. Transformers: Several are at the PGE substation at the eastern edge of the site.
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: A Phase 1 assessment was done by the Port of Portland for the site which resulted in limited removal of petroleum contaminated soil. No other evidence of contamination was found. No further site investigation is required to allow disposal of dredged material on site.

W-101.0, Gateway 3, Vancouver Lowlands, Vancouver, Washington Completed by Michael Gross, 17 March 1995, revised 16 January 1997

Recommendations. The Port must conduct and EBS and cleanup of the Egger farm site if disposal occurs at the farm site. No further investigation necessary otherwise.

Regulatory Records. Date(s) of records search 17 November 1995, updated 19 December 1996.

- A. Environmental Protection Agency: <u>EPA CERCLIS/NPL.</u> EPA has evaluated eight sites in southwest Vancouver and placed four on the NPL. Alcoa Aluminum is the closest to the site, 1.5 miles upriver from the site. It is an aluminum reduction facility that operated a landfill and several other waste management units on site. This site was deleted from the NPL on 30 September 1996. Frontier Hard Chrome, 5.5 miles upriver from the site is a chrome plating facility with local chromium contamination. Two sites are the city of Vancouver drinking water supply wells, 6 and 7 miles form the site, contaminated with solvents from nearby industry. None of these sites will affect disposal of material at the proposed site. Private drinking water wells at the farm sites and at the Aluminum facility and other businesses may be affected from material disposal.
- B. Oregon Department of Environmental Quality: Not applicable. The site is in Washington.
- C. Washington Department of Ecology: 1. Washington Confirmed and Suspected Contaminated Sites List. In zip codes 98660 and 98661, there are 15 sites with known contamination. Two sites are within 5 miles of the site. Alcoa Aluminum has several remediation issues related to 50 years of operations at their site. Primary issues center on a landfill at the southeast side of their facility. There are several closed and operating ponds on the west end of the facility immediately adjacent to the proposed site. The conditions on closure and groundwater monitoring program are not currently known. The other site is Carborundum Company on Port of Vancouver land not near the proposed site. Both appear far enough away to have no affect on the disposal site.
- 2. Washington UST List. In zip codes 98660 and 98661, there are 181 active underground storage tanks or unresolved underground storage tank problem sites. Several are on lower River Road. The Port of Vancouver has identified underground storage tanks on the farm sites that are not regulated or on state lists. One release on the VANALCO site is awaiting cleanup (LUST Nov 96; release number 375936).

Hazardous Materials Field Examination. Date of inspection 17 November 1995, 15 January 1997.

I. GENERAL PHYSICAL DATA

A. Description: This site is owned by the Port of Vancouver and is being examined for development by the port in their ongoing master plan, including dredged fill and wetland set aside. The site is approximately 410 acres located on river bottom between Vancouver Lake and the Columbia River, immediately downstream of the VANALCO aluminum reduction facility and upstream of the lake flushing channel. A levee essentially surrounds the site. The site is accessed from lower Rover Road. Much of the land will be used to receive material, the remainder will remain wetland. The Port of Vancouver is preparing a development plan for the site. A map is enclosed.

This site is bottom land and currently used for grazing, dairy and hay growing. Two farms are on site. Buildings from one farm is in the southwest corner (Lechtenberg farm) of the area, and may

be outside the proposed development project. This farm is a horse boarding site with 20 head of beef cattle. The site is a former dairy with a large barn but there is no active maintenance or operations at the site. Buildings from the other farm (Egger) are centrally located and potentially in way of development. Wetlands cover much of the site. Farming and has been the major land use of the area since before earliest District aerial photographs. The only observable changes have been the increase in number of buildings constructed at the farm sites. Evidence of pesticide, herbicide, solid waste disposal, organic contamination from animals and petroleum contamination from fueling operations exist mostly near the farm buildings. Aerial photographs dating from 1940 to the present were reviewed.

- **B. Structures:** Two farms are on site with the buildings centrally located (Egger) and in the southwest portion (Lechtenberg) of the site. Some farm buildings have been in place since 1940 (earliest Corps photography). Buildings were expanded in 1963 photography. Silos are present. The Egger farm has one large milking and hay barn that is no longer used for milking. A second large hay barn, large maintenance pole barn, smaller equipment and maintenance sheds and a house are on the site. About 50 dairy cattle are on site, but are not milked on site. Two large silos are on site but silage is mostly kept in mounds. Other structures include fencing for cattle. This farm occupies the majority of land on site. Most land on the Egger farm is in hay, corn and alfalfa production for livestock feed. The Lechtenberg farm in the northwest corner occupies only about 30 acres and is used exclusively for grazing or horse boarding. No large farm equipment was on site. One small house, one large barn and one maintenance shed were on the site. Wells were seen on both properties. Natural ponding occurs in low-lying areas over much of the site.
- C. Topography and Aspect: The area is essentially flat at about 10 feet MSL with a levee rising to approximately 30 feet MSL along the Columbia River, Vancouver Lake and flushing canal. The area immediately south of the canal was filled to about 30 feet with dredged material from the canal. The old Lower River Road is on fill and bisects the site. The new Lower River Road forms the eastern site boundary on a levee.
- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** High voltage powerlines that serve the aluminum facility are to the east of the site. A major substation for the aluminum plant is 300 feet east of the site. A major natural gas pipeline bisects the site running north and south.
- E. Access (roads, trails, other): Access is from River Road through industrial west Vancouver. The site is immediately left of Lower River Road immediately west of the aluminum facility northwest to the diversion channel. Both farms are accessed from Old Lower River Road, from the aluminum plant access road.
- **F.** Mining Activity: None on the subject property.

II. POTENTIAL HAZARODUS WASTE PROBLEMS:

A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The Lechtenberg farm buildings were not visited, but there is little activity on site that would require agricultural chemicals. The Egger farm had numerous barrels of lube and gear oil, stoddard-type solvent, paint, and hydraulic oils. One section of the milking barn had over 50 containers with different herbicides and pesticides. Three plastic tanks up to 2,000 gallons in size used for mixing pesticides were on the ground outside the milking barn. Several sacks of granular pesticides an other granular chemicals were on the ground and spilled near the silo. Some compressed gas cylinders (larger than normal acetylene) were near a part of the site where a tenant does small engine repair. The Port of Vancouver has been conducting compliance audits at the site since 1990. Since the beginning, conditions at the site have improved with most containers moved

under cover and some drip pans, but the site is generally in poor housekeeping condition. No potential problem sites were seen on the remainder of the property.

- **B.** Grazing/Logging Activities: Both farms graze cattle. About 50 dairy head are on the Egger property in a corral and barn, but no milking apparatus was seen. About 20 head of beef cattle are on the Lechtenberg site, mostly on pasture. The majority of the Egger land is in corn, hay or alfalfa. The two farms have been on site since before 1940.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Only in areas of heavy cattle use is vegetation stressed.
- **D.** Commercial Activity/Occupancy: The property is zoned industrial and owned by the Port of Vancouver. Commercial occupancy to date has been the farming activity. The Port is in the planning stages for industrial and wetland use of the site.

The adjacent aluminum reduction facility contains treatment and sludge ponds closed and currently in operation. The extent of groundwater monitoring and/or contamination has been investigated. According to ALCOA who maintains responsibility for the past releases, (Al Piecka), quarterly monitoring of the ponds identify contaminant levels. Current use of the ponds by VANALCO does not contribute to contaminant levels. A nearby area, east of the ponds used by Crowley Marine has shallow groundwater contamination from petroleum products. Because groundwater gradients are toward the river, and the distance from dredged material placement, affects from hydrofilling are unlikely (Al Piecka and Paul Skyllingstad, Ecology). One release on the VANALCO site is awaiting cleanup (LUST Nov 96; release number 375936). East of the disposal site is a solid waste transfer and recycling facility. The site is of recent construction and waste management.

- E. Unusual Seepage: None observed.
- F. Solid Waste: There is evidence that dredged material has been disposed on site in the past near the entrance road to the aluminum plant. This area is not considered to receive material from the project. The waste recycling facility is also outside the area. The facility is new within the last two years and within compliance for waste and water management. An area 150 feet long by 50 feet wide behind the Egger barnyard shows evidence of recent solid waste landfilling. Rubbish, plastic, drums and other containers are seen poking through the ground surface. These are apparently from farm use and dumped in an unengineered area. There are several piles of debris, old engine parts, small engines and rubbish scattered about the Egger site. There is an apparent woody debris dump site riverward of the levee near the Lechtenberg house.
- G. Unidentified piles of solids or any pools of liquids: Several piles of solid waste debris, and granular chemicals were seen on the Egger site.
- H. Sick or dead wildlife or domestic animals: Cattle appeared healthy if not particularly well cared for at the Egger site. Many cats were seen on both sites, all appeared well.
- I. Unusual or noxious odors: None
- **J. Discolored or disturbed soil areas:** There were many areas of stained soil at the Egger site, near underground storage tanks, near maintenance areas, around the barn and small engine repair area. The soil was disturbed behind the barn yard where the apparent landfill activity was going on. The evidence of fill near the aluminum facility road and near the flushing canal is understood to be from previous dredged fill placement.

- K. Sewage or Septic Systems: The homes are assumed to be on septic. Dairy operations have a significant potential impact on groundwater from nitrate pollution. Domestic groundwater wells are used for drinking and coliform levels are satisfactory for coliform according to compliance reports.
- L. Petroleum Products (Oil/Gas storage facilities): No tanks were seen at the Lechtenberg site other than an above ground heating oil tank that was overgrown with vines. The Egger site had an above ground heating oil tank that was perched on old wood bracing. Evidence of two underground storage tanks were seen. One was leaking from above ground piping. Numerous drums and containers of lube oil and hydraulic oil were on the Egger site.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, Lime, etc.): At least 50 separate containers of herbicides and pesticides were in the Egger barn. Three large mixing tanks were outside on the ground. Some granular pesticide (Dyfonate II) in open bags was seen on the ground with some other unknown granular chemical.
- N. Transformers: None
- **O.** Batteries: About ten car type batteries were seen on a pallet in the maintenance area at the Egger site.

CONCLUSIONS AND RECOMMENDATIONS: Based on compliance audit reports and the site visit, the Egger site has a great deal of soil and subsurface contamination potential from pesticides, underground storage tanks, solid waste disposal and other activity. No evidence of contamination was found outside the farm buildings or that would be affected by disposal outside the farm buildings except the small landfill. An extensive EBS and cleanup of the farm site will likely be required by the Port prior to development and use as a disposal site.

Vancouver Lowlands Mitigation Site, Vancouver, Washington Completed by Michael Gross, 16 January 1997

RECOMMENDATIONS: Conduct EBS if project work uses farm building sites. No EBS required if cropland and pastureland only is used for the project.

Regulatory Records

Date(s) of Records Search: 17 November 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated eight sites in southwest Vancouver and placed 4 on the NPL. Alcoa is the closest to the site, 2 miles upriver from the site. It is an aluminum reduction facility which operated a landfill and several other waste management units on site. The site was deleted from the NPL on 30 September 1996. Frontier Hard Chrome, 6 miles upriver from the site is a chrome plating facility with local chromium contamination. Two sites are the city of Vancouver drinking water supply wells, 6 and 7 miles from the site, contaminated with solvents. None of these sites will affect use of the proposed site.
- B. Oregon Department of Environmental Quality: Not applicable. The site is in Washington.
- C. Washington Department of Ecology: 1. Washington Confirmed and Suspected Contaminated Sites List. In Zip Codes 98660 and 98661 there are 15 sites with known contamination. Two sites are within 5 miles of the site. Alcoa Aluminum has several remediation issues related to 50 years of operations at their site. Primary issues center on a landfill at the southeast side of their facility. The other site is Carborundum Co. near the proposed site. Both appear far enough away to have no affect on the proposed site.
- 2. Washington UST List. In Zip Codes 98660 and 98661 there are 181 active USTs or unresolved UST problem sites. Several are on lower River Road. A site investigation would determine whether tanks are on the proposed site. Probable locations are at the farm sites. One release at the aluminum facility is awaiting cleanup or in progress (LUST Nov 96, Release No. 375936). The release is related to Crowley Marine.

Hazardous Materials Field Examination Date of Inspection: 17 November 1995

I. GENERAL PHYSICAL DATA

A. Description: This 288 acre site is primarily owned by the Port of Vancouver and is part of a larger area considered by the Port for development and wildlife mitigation. The site is located on river bottom land between Vancouver Lake and the Columbia River, immediately downstream of the lake flushing channel. Levees protect the area from flooding. At the time of the field inspection, the mitigation site land had been planted in corn and hay that is used at a dairy farm on the lower River Road. Waterfowl were using the site for wintering and feeding. Two farms are located adjacent to the mitigation site but all farm buildings are excluded from the proposed site. The site is accessed from Lower River Road.

This site is bottom land and currently used for grazing, dairy and hay growing. Two farms are on site, with buildings from both farms in the southwest corner of the area. Both farms are operated by one tenant (Si Ellen Farms). Wetlands cover much of the northern and eastern section of the sites. Farming and has been the major land use of the area since before earliest Corps of Engineers aerial photographs. The only observable changes have been the increase in number of buildings constructed at the farm sites. The potential for pesticide, herbicide, organic contamination from animals and petroleum contamination from fueling operations exist mostly near the farm buildings.

Aerial photographs dating from 1940, 1948, 1956, 1963, 1966, 1968, 1971, 1974, 1977, 1980, 1981, 1982, 1983, 1991 and 1995 were reviewed. A natural gas pipeline has been constructed across the site.

- **B. Structures:** Two farms are on site with the buildings located in the southwest portion of the site. The main farm west of the mitigation site along the levee is a dairy operation with a large barn, silos, several equipment barns and two houses. Some farm buildings have been in place since 1940 (earliest Corps photography). Buildings were expanded in 1963 photography. Silos are present. The farms are currently dairy operations with silage mounds, hay and milking barns and houses. The secondary farm east of River Road near the proposed site has a large barn and several smaller buildings and large silage mounds. These structures are not within the boundary of the proposed mitigation site. The remaining areas are fields for hay and grazing. A small building on the natural gas pipeline is centrally located. A small house is in the northeast portion of the site. Natural ponding occurs in low lying areas in the northern half of the site. The sites use wells for drinking water.
- C. Topography and Aspect: The area is essentially flat, with an approximately 20-foot high rise to levees along the Columbia River and Vancouver Lake flushing channel and to River Road to the east.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: A natural gas pipeline crosses through the center of the site from north to south.
- E. Access (roads, trails, other): Access is from River Road through industrial west Vancouver. River Road marks the eastern boundary of the site along the levee bordering Vancouver Lake. Lower River Road immediately north of the diversion channel marks the southern edge of the site and turns north to mark the western edge of the site.
- F. Mining Activity: None on the subject property.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The farm yards contained many small containers. There were unknown drums in the main maintenance barn loft. The farm sites are in relatively good order. Documents from Port compliance reviews do not indicate extensive containers.
- **B.** Grazing/Logging Activities: Both farms are dairy operations with the bulk of the open spaces used for corn or hay cropland. Feed lots are near the outbuildings. The two farms have been on site since before 1940.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Only in areas of heavy cattle use is vegetation stressed, mostly around the farm yards and not on the proposed mitigation site.
- **D.** Commercial Activity/Occupancy: The property is zoned industrial and owned by the Port of Vancouver. Commercial occupancy to date has been the farming activity. The Port is in the planning stages for industrial and wetland use of the site.

The nearby aluminum reduction facility contains treatment and sludge ponds closed and currently in operation. The extent of groundwater monitoring and/or contamination has been investigated. According to ALCOA who maintains responsibility for the past releases, (Al Piecka), quarterly

monitoring of the ponds identify contaminant levels. Current use of the ponds by VANALCO does not contribute to contaminant levels. A portion of the aluminum facility east of the ponds used by Crowley Marine has shallow groundwater contamination from petroleum products. Because groundwater gradients are toward the river, and the distance from the proposed mitigation site, affects from petroleum contamination are unlikely (Al Piecka and Paul Skyllingstad, Ecology). One release on the ALCOA site are awaiting cleanup or in progress (LUST Nov 96) Release No. 375936. East of the disposal site is a solid waste transfer and recycling facility. The site is of recent construction for solid waste management.

- E. Unusual Seepage: None observed
- **F. Solid Waste:** The secondary farm site east of lower River Road contains a large area with junk vehicles. Although the farm uses tires to anchor plastic over silage piles, over 300 used tires are on site, many more than would be needed for silage piles. This area is not within the proposed mitigation site.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: Other than soil around farm buildings and within corrals, there was no unusual disturbance of soils.
- **K.** Sewage or Septic Systems: The homes are assumed to be on septic. Dairy operations have a significant potential impact on surface and groundwater from nitrate pollution. Domestic groundwater wells are used for drinking and coliform levels are satisfactory according to compliance reports.
- L. Petroleum Products (Oil/Gas storage facilities): There were three underground and one above ground fuel or gasoline tanks at the main farm. One UST was seen at the secondary farm. The gas transmission line cuts through the property.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): Usage is unknown. There were few containers seen on site. Dairy operations typically do not have significant chemical usage.
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: Any use of the proposed farm yards, outbuildings and silage pits would require additional investigation. Any development of the site for mitigation that only includes croplands and pasture and does not include the farmyards could go forward without additional site assessment assuming the natural gas pipeline and structures remain untouched.

O-98.5, Sauvie 1, Sauvie Island, Oregon

Completed by Michael Gross, 17 March 1995, revised 30 October 1996

Recommendations: No evidence of hazardous materials affecting or affected by dredged material disposal. Acquire rights for disposal without further investigation.

Regulatory Records. Date(s) of records search 21 November 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated 34 sites in Portland within 5 miles of Sauvie Island. Other than a drum pulled out of the river in 1992 at RM 100, there are no sites at Sauvie Island on CERCLIS.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST Facilities List. There are 10 active tanks in zip code 97231 either on Sauvie Island or on HWY 30. One site, Delta Farms, at 16511 Gillihan, had 2 tanks decommissioned.
- 2. Oregon UST Cleanup List. One site on Sauvie Island, Sauvie Island School Dist #19, at 14445 NW Charleton Road has an unresolved underground storage tank cleanup. This is within a mile of the proposed site. There are 70 sites in the zip codes 97203 and 97217 where leaking underground storage tank problems have not been resolved.
- 3. <u>Oregon Environmental Cleanup Site Information System</u>. There are no sites on Sauvie Island on the list.
- C. Washington Department of Ecology: Not applicable. Washington sites are hydraulically separated by the Columbia River.

Hazardous Materials Field Examination. Date of inspection 21 November 1995

I. GENERAL PHYSICAL DATA

- A. Description: This is an oblong 48 acre site on the east shore of Sauvie Island bounded on the north and east by a levee. The site is zone for farm and open space use. The site is currently used for berry farming with raspberry or marionberry vines. No structures are on the site beside berry vine supports. The site is bounded on the east by Reeder Road. Houses border the site to the south. Sauvie Island is a large delta sand bar island at the mouth of the Willamette River. Much of the island is used for dairy and other agricultural use. The northern half of the island immediately northeast of the site is a wildlife refuge and lake.
- **B.** Structures: No structures are on site.
- C. Topography and Aspect: The area is essentially flat, at about 20 feet above sea level. The levee, road and houses surrounding the site are all raised to above 30 feet above sea level.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: Local power at the road is on overhead lines. Pole transformers are nearby.
- E. Access (roads, trails, other): Access is from Reeder Road on Sauvie Island. The site itself has dirt roads surrounding the site.
- F. Mining Activity: None

II. POTENTIAL HAZARODUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: One drum which was found in the river at RM 100 has been removed by the Coast Guard. The state removed several drums from Sauvie Island after the 1996 floods, but they had no apparent affects to this site.
- B. Grazing/Logging Activities: Nearby sites are used for dairy farming. The site itself is not used for grazing.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: Nearby homes are assumed to be on septic systems.
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): There is potential use at the berry fields.
- N. Transformers: Roadside pole transformers are the only ones present.
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No known potential contamination exists at the site. Acquire rights for disposal of dredged material without further investigation.

REACH 2 SITES

W-97.1, Fazio Sand and Gravel, Ridgefield, Washington Completed by Michael Gross, 17 March 1995, revised 8 November 1996

Recommendations. The potential for contamination from petroleum products and equipment maintenance requires an EBS if property is acquired. However, if disposal and processing at the site continues under the same ownership, no additional investigation is required.

Regulatory Records. Date(s) of records search 17 November 1995

- **A. Environmental Protection Agency:** <u>USEPA CERCLIS/NPL</u>. The Pacific Wood Treating site on West Division in Ridgefield is on CERCLIS but has not been evaluated by EPA. The site is not near the proposed disposal site.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. The list indicates 31 active or unresolved tanks in Ridgefield, none along Lower River Road or near the sites.
- 2. <u>Washington Confirmed or Suspected Contaminated Sites List</u>. Neither of the two Ridgefield sites on the Washington Confirmed or Suspected Contaminated Sites list are near the potential disposal sites. One of these is the Pacific Wood Treating site on West Division.

Hazardous Materials Field Examination. Date of Inspection 8 December 1995

I. GENERAL PHYSICAL DATA.

- A. Description. This site is a 26.6-acre former dredged material disposal site which is now a sand and gravel operation. The owner actively places dredged material on site and mines it for sand. This site is on the riverward side of Lower River Road on the shore of the Columbia River west of Ridgefield, Washington. The site is piled high with sand.
- **B.** Structures. The site consists of mounded sand on river bottom land. A truck weigh scale was seen from the road. Other structures on site were not visible.
- C. Topography and Aspect: The original topography of the site was flat flood plain at approximately 10 feet MSL. The Columbia River level bisects the site north to south to about 30 feet MSL. Fill from dredging has raised the topography to 40 feet in local piles and about 30 feet MSL overall. The site sits adjacent to the Columbia River and is oblong tending north to south.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: Local power and telephone lines serve the site. No other utilities are visible.
- E. Access (roads, trails, other): Access to the site is along Lower River Road from west Vancouver. The road is a little traveled two lane blacktop serving the few residences, moorages and the wildlife refuge near the site. The road forms the eastern boundary of the site. The levee section is not part of the road at the site.
- **F.** Mining Activity: The sand and gravel operation on site mines aggregate from the bottom of the river adjacent to the site. Aggregate is dredged and placed on site, sorted and transported by truck from the site.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: Most of the site was not visible due to high mounds. Presence cannot be determined. An adjacent feed lot and dairy site had about 15 55-gallon drums with unknown contents.
- B. Grazing/Logging Activities: None on site. The site to the north is used as a feed lot and dairy.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: The visible site is generally devoid of vegetation due to sand mounds.
- **D.** Commercial Activity/Occupancy: Fazio Sand and Gravel has used the site for their operations for several years.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: Could not be determined.
- K. Sewage or Septic Systems: Probably on-site septic system
- L. Petroleum Products (Oil/Gas storage facilities): The mining operation likely has a fueling system including fuel storage, but this could not be observed from the road. A maintenance area is also likely. Some of the drums on the adjacent site are marked "Hydrotex". Research into MSDS for this brand name indicates a series of oils lubricants and solvents for vehicles.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): No known usage. Potential on the adjacent site.
- N. Transformers: Associated with local service on power poles.
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: A Phase 2 assessment if necessary based on a site visit would indicate whether maintenance and fueling operations on site have impacted the site. Although the site was not entered, there are likely equipment maintenance operations, which would require investigation if the site were recommended for acquisition. Recommend an EBS if site is acquired. If site remains in current ownership and operation, no further investigation is recommended.

W-96.9, Adjacent Fazio Sand & Gravel, Ridgefield, Washington Completed by Michael Gross, 17 March 1995, revised 21 November 1996

Recommendations. Investigate the contents and potential leakage of drums located near the property boundary.

Regulatory Records. Date(s) of records search 17 November 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u> The Pacific Wood Treating site on West Division in Ridgefield is on CERCLIS but has not been evaluated by EPA. The site is not near the proposed disposal site.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. The list indicates 31 active or unresolved tanks in Ridgefield, none along Lower River Road or near the site.
- 2. <u>Washington Confirmed or Suspected Contaminated Sites List</u>. Neither of the two Ridgefield sites on the Washington Confirmed or Suspected Contaminated Sites list is near the potential disposal sites. One of these is the Pacific Wood Treating site on West Division.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA.

- A. Description: The site is riverward of Lower River Road, immediately north of site W-97.1, about 1.5 miles south of the Ridgefield National Wildlife Refuge along the Columbia River. The site surrounds but does not appear to include a dairy operation. The site is low lying pasture, but at the center of the area is a large pile of silage and a feed lot. This portion may be outside the proposed disposal site. Adjacent to the feed lot were about fifteen 55 gallon barrels, some red and white, others blue and white. The site was not entered. The red and white drums were labeled with "Hydrotex" (a check of MSDS lists for this company includes lube, engine oil and solvents). The dairy farm buildings and immediate operation area does not appear to be part of the disposal site and should be avoided. The silage pile and feed lot are high and have little capacity. The remainder of the site is sparsely vegetated with a few trees, and about 20 feet MSL. It has been previously used for dredged material disposal.
- **B. Structures:** The site itself does not have structures. The area immediately to the south is a dairy and feedlot operation containing the silage pile and three dairy buildings.
- C. Topography and Aspect: The original topography of the site was flat flood plain at approximately 10 feet MSL. The Columbia River levee bisects the site north to south to about 30 feet MSL. Fill from dredging has raised the topography to 20 feet MSL overall. The site sits adjacent to the Columbia River and is odd shaped, wrapping around the central silage pile.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: Local power and telephone lines serve the site. No other utilities are visible.
- E. Access (roads, trails, other): Access to the site is along Lower River Road from west Vancouver. The road is a little traveled two-lane blacktop serving the few residences, moorages and the wildlife refuge near the site. The road forms the eastern boundary of the site. The levee section is not part of the road at the site.

F. Mining Activity: The site has been used in the past for dredged material disposal. No apparent sand borrow areas were visible.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The central dairy and feedlot/silage area that appears to be outside the site had about 15 55 gal drums with unknown contents stored on the ground adjacent to the pile. The site was not entered, so contents of the dairy was not observed. Labels of several drums were by the company Hydrotex which manufactures lubricating oils and solvents.
- B. Grazing/Logging Activities: The site may have been used for grazing by the dairy operation.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: The site has little grass, has bare sand and some trees, and appears to have been grazed.
- D. Commercial Activity/Occupancy: Dairy adjacent.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: Apparent silage pile on site.
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: Could not be determined.
- K. Sewage or Septic Systems: Probably on site septic system.
- L. Petroleum Products (Oil/Gas storage facilities): Some of the drums were marked with "Hydrotex" which is a brand name for a vendor of lube and engine oils and solvents. Storage on the remainder of the dairy could not be observed. An equipment maintenance area is possible.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): Potential pesticide usage on the adjacent dairy site.
- N. Transformers: Associated with local service on power poles.
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: A Phase 2 assessment if necessary based on a site visit would indicate whether containers on the site, maintenance and dairy operations on site have impacted the site. The containers may be on the adjacent property. Recommend an Environmental Baseline Study to determine if drums have affected the subject property.

W-95.8, Ridgefield, Washington

Completed by Michael Gross 17 March 1995, revised 22 November 1996 (Note: This site is adjacent to W-95.7)

Recommendations. No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 17 November 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. The Pacific Wood Treating site on West Division in Ridgefield is on CERCLIS but has not been evaluated by EPA. The site is not near the proposed disposal site.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. The list indicates 31 active or unresolved tanks in Ridgefield, none along Lower River Road or near the site.
- 2. <u>Washington Confirmed or Suspected Contaminated Sites List</u>. Neither of the two Ridgefield sites on the Washington Confirmed or Suspected Contaminated Sites list is near the potential disposal sites. One of these is the Pacific Wood Treating site on West Division.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA.

- A. Description: The site is riverward of Lower River Road and a levee, immediately south of the edge of the Ridgefield National Wildlife Refuge along the Columbia River. The site is a 36.9-acre oblong north/south tending and low lying former dredged material site along the beach of the Columbia River. The site is mounded and rolling and is currently used for open space and as a feed lot. The site is covered with grasses and scotch broom except at the feed lot where it is bare.
- **B.** Structures: Some cattle fencing is the only structure noted on site.
- C. Topography and Aspect: The original topography of the site was flat flood plain at approximately 10 feet MSL. The levee and road form the eastern boundary of the site which has been filled to approximately 20 feet MSL overall, and is rolling and mounded. The site tends north to south and is an oblong oval. It is surrounded by pastureland and the wildlife refuge.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: Local power and telephone lines serve the site. No other utilities are visible.
- E. Access (roads, trails, other): There are no roads on site. The site is accessed from Lower River Road, which forms the eastern site boundary. The road is a little traveled two-lane blacktop that ends at the north end of the site.
- F. Mining Activity: The site has been used in the past for dredged material disposal. No apparent sand borrow areas were visible.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None observed on site.
- B. Grazing/Logging Activities: The northern portion of the site is currently being used as a feed lot for beef cattle.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: The feed lot is bare, but the remainder of the site is vegetated with grass and brush.
- D. Commercial Activity/Occupancy: None.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None observed.
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: The feed lot area is heavily trafficked and soiled by cattle.
- K. Sewage or Septic Systems: None apparent.
- L. Petroleum Products (Oil/Gas storage facilities): None observed.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None observed.
- N. Transformers: None
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

O-94, Sauvie 94, Sauvie Island, Oregon (Mitigation) Completed by Michael Gross, 17 March 1995, revised 30 October 1996

Recommendations. Conduct an EBS at the farm site for petroleum, asbestos, lead and other equipment maintenance products if acquiring the entire property.

Regulatory Records. Date(s) of records search 21 November 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated 34 sites in Portland within 5 miles of Sauvie Island. Other than a drum pulled out of the river in 1992 at RM 100, there are no sites at Sauvie Island on CERCLIS.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST Facilities List. There are 10 active tanks in zip code 97231 either on Sauvie Island or on HWY 30. One site, Delta Farms, at 16511 Gillihan, had 2 tanks decommissioned.
- 2. <u>Oregon UST Cleanup List</u>. One site on Sauvie Island, Sauvie Island School District #19, at 14445 NW Charleton Road has an unresolved underground storage tank cleanup. This is within two miles of the proposed site. There are 70 sites in zip codes 97203 and 97217 where leaking underground storage tank problems have not been resolved.
- 3) Oregon Environmental Cleanup Site Information System. No sites on the island are on the list.
- C. Washington Department of Ecology: Not applicable. Washington sites are hydraulically separated by the Columbia River.

Hazardous Materials Field Examination. Date of inspection 21 November 1995

I. GENERAL PHYSICAL DATA

- A. Description: This is a 265-acre rectangular farm used for beef cattle and cattle feed raising. The site is in the middle of Sauvie Island, a large floodplain island at the mouth of the Willamette River. The site is surrounded by national and state wildlife refuges and is heavily used by wintering water fowl, resident eagles and other wildlife. The site is within Columbia No. 1 Diking District, protected by a levee from the main Columbia channel. The levee is at the eastern edge of the site. The farm has two houses and some small equipment barns. The barns are in poor condition and small for the size of the farm. A small tractor with some lubricant containers were seen at the site. Two small above ground fuel tanks are on site. The buildings are in the northeast corner of the site. Reeder Road forms the eastern boundary of the site. Sauvie Island is a large delta sand bar island at the mouth of the Willamette River. Much of the island is used for dairy and other agricultural use and the site is open pasture and corn fields with some cottonwood trees. The northern half of the island is a wildlife refuge and lake.
- **B.** Structures: Two homes, and three small barns with several other wood and metal outbuildings are on site in the northeast corner. Most are in poor condition. One house appears to have asbestos type siding. Most barns are wood frame and likely painted with lead based paint.
- C. Topography and Aspect: The area is essentially flat, at about 10 feet above sea level and is rectangular in the middle of the refuge. The levee to the east rises to about 30 feet above sea level.
- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** Local power at the road is on overhead lines. Pole transformers are nearby.

- E. Access (roads, trails, other): Access is from Reeder Road on Sauvie Island. The site itself has dirt roads.
- F. Mining Activity: None
- II. POTENTIAL HAZARODUS WASTE PROBLEMS:
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: One drum which was found in the river at RM 100 has been removed by the Coast Guard. The state removed several drums from Sauvie Island after the 1996 floods, but they had no apparent affects to this site. Petroleum containers and other equipment maintenance chemicals are visible or likely on site.
- **B.** Grazing/Logging Activities: The site is mostly used for beef cattle grazing. The remainder of the property is planted in corn.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed.
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed.
- **F.** Solid Waste: The barns and outbuildings were poorly maintained and the visible bays had evidence of debris and other waste.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: The homes are assumed to be on septic systems.
- L. Petroleum Products (Oil/Gas storage facilities): Two above ground tanks (~200 gallons each) on racks were seen on site. No containment was beneath the tanks. A few drums with presumably oils were also seen.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): There is potential use of fertilizer and pest/herbicides at the corn fields and pesticides for the cattle.
- N. Transformers: Roadside pole transformers are the only ones present.
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: The site did not have large facilities for farming and cattle ranching, but the potential for agricultural chemical and petroleum contamination exists particularly at the farm site. Solid waste potential is also high, and the buildings probably have asbestos and lead paint. The facilities were in poor repair. An Environmental baseline study at the site will be necessary is the farm site will be acquired. If only fields will be acquired, no additional investigation is necessary.

O-91.5, Lonestar Gravel Pit, Scappoose, Oregon

Completed by Michael Gross, 17 March 1995, revised 8 November 1996

Recommendations. Conduct EBS on south end of pit in equipment storage area. If mine remains in current ownership and operation, dredge material disposal may occur without further investigation.

Regulatory Records. Date(s) of records search 17 November 1995

- **A. Environmental Protection Agency:** <u>USEPA CERCLIS/NPL</u>. The City of Scappoose Dumping Area was evaluated by EPA but was considered a NFA. No evidence of dumping pentachlorophenol and creosote waste from McCormick and Baxter was confirmed.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List. There are 38 Active tanks in Scappoose, the closest city to the site. None appear to be within two miles of the site.
- 2. <u>Oregon UST Cleanup List</u>. There are 6 unresolved underground storage tank cleanups in Scappoose. None appear close to the site.
- 3. Oregon Environmental Cleanup Site Information System. Santosh Pit is a sand and gravel mine immediately north of the site, which was converted and operated as a solid waste landfill in 1968 to 1983. The site is currently a low priority site under the ODEQ Environmental Cleanup Division. Metals groundwater contamination was measured until 1986 by ODEQ. Water in the barge channel adjacent to the site was sampled by ODEQ in 1993 and pentachlorophenol and naphthalene were found at low levels. Low levels of a herbicide and arsenic were found in soil and water near the site. This may not be site related because it appears ODEQ may not have been on site at the time of sampling. The concern at the site is migration of contaminants to surface water. In 1993 ODEQ recommended to the owner that he maintain the soil cap, measure groundwater contamination, and look at installing a gas venting system. No reply from the current owner (Steve Jensen, ROST Inc.) is in ODEQ files. Gil Wooster, ODEQ project manager has no information on voluntary actions by the owner and ODEQ has taken no actions. He also is not concerned with the long-term use of the Lone Star site for fill with dredged material if the material is clean sand.

Cascade Aggregates is listed in the ECSI based on a diesel fuel spill in the barge channel in 1989 cleaned up on the day it occurred by Riedel (RES). Although the documentation in DEQ files is not complete, no further action on site is necessary. Other sites listed include Steinfeld, a Crown Zellerbach site east of the site, a suspected groundwater contamination site on E Columbia, and the Scappoose Dumping Area.

- 4. <u>Oregon Confirmed Release List</u>. The Linnton Oil Fire Training Grounds may be close to Scappoose but does not appear close to this site.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA:

A. Description: This site is a sand and gravel borrow pit operated by Lone Star Concrete. The site is just north of the Scappoose airport on flood plain just outside the Scappoose Drainage District. The main pit is approximately 100 acres mined to approximately 100 feet in depth. An adjacent pit is mined and gravel is conveyed to the main sorting area by conveyor. Mining has

occurred on site from 1970 until the present, first as Cascade Aggregates, and later as Lone Star Concrete. Presently Lone Star mines the site and ships by barge to its concrete and asphalt plants in Portland. A barge channel was dredged to access Multnomah Channel at the beginning of site operations. There are several other areas currently and historically mined nearby. The land use is generally farm to the south and east, and wildlife habitat to the north. An old closed gravel pit and solid waste landfill is to the immediate north of the north pit. Some residential development is south of the site and near the Scappoose airport.

Sand and gravel mining has occurred on site since 1970 until the present. A barge channel was excavated and several large pits have been operated here. A dragline system removes gravel from beneath the site where it is sorted at the north edge of the site. The operation is two large pits connected by conveyor. Prior to mining, the site was operated as a farm. Immediately to the north of this site is the former Santosh Pit which was mined from about 1960 until 1968 when it became the main solid waste landfill for Columbia County. The 8-acre landfill stopped operating in 1983 due to problems with flooding, inadequate cover and leachate complaints.

- **B. Structures:** The site consists of two large open pit gravel mines. The south pit, currently in operation, contains one large fixed dragline derrick with several supporting guy wires. The dragline pulls material to the shore where front end loaders place material into a hopper which loads material onto a conveyor. The conveyor moves material to stockpile in the adjacent pit where it is sorted. The facilities at the adjacent pit consist of another dragline derrick, sorting equipment, trailer offices, and maintenance area. A barge loading dock is located on a canal at the north end of the site.
- C. Topography and Aspect: The original topography of the gravel mine was a flat floodplain at approximately 45 feet above mean sea level. This sloped down to the north to wetlands and the Scappoose Bay. To the east the gradual slope was to bottomland at about 10 feet above MSL. The mines are excavated to about 100 feet below MSL. Water level is at about 5 feet MSL. Both pits are roughly rectangular ins shape, and are joined at one corner where the road bisects the site.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: Local power and telephone lines bisect the site along the road right of way.
- E. Access (roads, trails, other): Access to the site is along Dike Road from the north end of Scappoose. The road bisects the site and the pits can be entered where the road crosses a bridge at the pit. The work area is accessed along a gravel road a few hundred feet west of the bridge.
- **F. Mining Activity:** The site is a currently active gravel mine using dragline technology. A sorting, conveyor and barge loading operation are located at the north end of the site.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The site was not entered. Presence cannot be determined.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed.
- **D.** Commercial Activity/Occupancy: Lonestar Gravel and other mining operations have been in place on site since about 1970.

- E. Unusual Seepage: None observed.
- **F. Solid Waste:** At the extreme south end of the mine is a storage yard used for equipment and other materials. Without a site visit, it was difficult to determine whether solid waste disposal was also occurring in this area.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: Only those associated with mining. Not able to observe work area or storage area.
- K. Sewage or Septic Systems: Probably on site septic system.
- L. Petroleum Products (Oil/Gas storage facilities): The mining operation likely has a fueling system including fuel storage, but this could not be observed from the road. A maintenance area is also likely.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): No known usage; not likely.
- N. Transformers: Associated with local service on power poles.
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: Potential exists from solid waste and other materials at the bone yard area. A Phase 2 assessment if necessary based on a site visit would indicate whether this statement is true. Recommend a site visit and if necessary, an EBS. If the project does not require acquisition of the bone yard area, no further investigation is necessary.

O-90.6, Scappoose Dairy, Scappoose, Oregon Completed by Michael Gross, 17 March 1995, revised 6 November 1996

Recommendations. Obtain an Environmental Baseline Study of the site for use of and contamination from agricultural chemicals, and underground tanks, asbestos and lead. If only fields are needed for the project and the farm site and buildings can be avoided and not acquired, no further investigation is required.

Regulatory Records. Date(s) of records search 21 November 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. The City of Scappoose Dumping Area was evaluated by EPA but was considered a NFA. This was an alleged dumping of waste crossote and pentachlorophenol from McCormick and Baxter, but was not located or confirmed.
- B. Oregon Department of Environmental Quality: 1. Oregon UST List. There are 38 Active tanks in Scappoose, the closest city to the site. None appear to be within two miles of the site.
- 2. <u>Oregon UST Cleanup List</u>. There are 6 unresolved underground storage tank cleanups in Scappoose. None appear close to the site.
- 3. Oregon Environmental Cleanup Site Information System. Cascade Aggregates, (Santosh Pit) is a sand and gravel immediately west of the site. It is listed three times in the ECSI list but is not on the confirmed list. Other sites on the list include Steinfeld, a Crown Zellerbach site east of the site, a suspected groundwater contamination site on E Columbia, and the Scappoose Dumping Area. None appear close to the site.
- 4. <u>Oregon Confirmed Release List</u>. The Linnton Oil Fire Training Grounds may be close to Scappoose but does not appear close to this site.
- C. Washington Department of Ecology: Not applicable. The site is not in Washington.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA

- A. Description: This site is a 107-acre dairy farm on bottomland landward of Multnomah Channel near Scappoose. The site is located where Sauvie Island is at its narrowest point. The site is pasture, hay fields, silage mounds and dairy buildings within the Scappoose Drainage District levee. The site is currently used for grazing, dairy and hay growing. Buildings on the site include a silo, milking and hay barns and two homes. The land use is consistent throughout the history reviewed in aerial photos of 1940, 1957, 1966, 1977, and 1991. The potential for pesticide, herbicide, organic contamination from animals, and petroleum contamination from fueling operations are possible but not likely to be concentrated. There is a potential for petroleum tanks.
- **B. Structures:** The site contains two houses, a milking barn, hay barns, silage mounds a silo, several drainage channels for diking district internal drainage, and a pump station. There is most likely a drinking well on site.
- C. Topography and Aspect: The area is essentially flat, at about 10 feet above sea level. The levee borders the site on the east and north, rising to above 30 feet above sea level.

- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** Local power at the road is on overhead lines. Pole transformers are nearby.
- E. Access (roads, trails, other): Access is from Hwy 30 in Scappoose to Honeyman Road or Dike Road. The site itself is served by gravel and dirt roads.
- F. Mining Activity: None
- II. POTENTIAL HAZARDOUS WASTE PROBLEMS:
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: No on site inspection has been made, so evidence of potential problem containers won't be known until a site visit is made. No evidence on surrounding areas was seen.
- B. Grazing/Logging Activities: A few of the parcels on site are used for grazing. Most dairy cattle feeding appears to occur on a feed lot on site.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed except in areas of cattle use.
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: Mounds of silage are on site near wetlands.
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: In the barn area from dairy cattle.
- K. Sewage or Septic Systems: Homes are assumed to be on septic systems.
- L. Petroleum Products (Oil/Gas storage facilities): None observed but potential exists.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): There is potential use at the site for insect and fungus control on cattle.
- N. Transformers: Roadside pole transformers are the only visible ones present.
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: The potential for contamination from petroleum tanks, farm equipment maintenance and agricultural chemicals is evident. Site investigation possibly leading to sampling program if acquisition and/or use of use of farm site for disposal of dredged material. No further investigation otherwise required.

O-87.8, Port of St. Helens Creosote, (Railroad Corridor), St. Helens, Oregon Completed by Michael Gross, 17 March 1995, revised 22 November 1996

Recommendations. Review RI/FS process and documentation, monitoring the investigation, results, and selected remedial action. Contact EPA, the State of Oregon, and the owner concerning the potential to include the site as part of a brownfield remedial action. Pursue insulation of the Corps from liability should dredged material from the proposed project be used at the site.

Regulatory Records. Date(s) of records search 17 November 1995, updated 16 October 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated six sites in St. Helens but has not placed any on the NPL. Four sites, including one immediately adjacent site (Owens Corning Fiberglas) were No Further Action Sites, but two sites have not been placed on the NPL primarily because the state of Oregon is moving forward with investigations or cleanups at the sites. Those two sites are Bergsoe metals and the Port of St. Helens Creosote Site. Bergsoe is not near the site. Port of St. Helens is the proposed disposal facility.
- B. Oregon Department of Environmental Quality: 1. Oregon UST List. In St. Helens there are 44 active tanks.
- 2. Oregon UST Cleanup List. There are four unresolved underground storage tank removals in St. Helens, but all are on Highway 30 and not near the site. There is unresolved petroleum contamination on site primarily from management of waste oils on site while Niedermeyer Martin was leasing the site.
- 3. <u>Oregon Environmental Cleanup Site Information System</u>. In addition to the site itself, three neighboring properties, Boise Cascade's landfill, C&R Auto Wrecking, and Armstrong World Industries are on the list. The closest is C&R Wrecking, which has no confirmed contamination, although sampling was done for only TPH and PCB. Nine other sites in St. Helens are on the list. The Port of St. Helens site itself is the only site on the <u>Oregon Confirmed Release List</u>.
- 4. Oregon Confirmed Release List. (ODEQ File Review, Nov 95) ODEQ first examined the site in 1988 and EPA conducted a site investigation in 1989. The subsequent report revealed heavy contamination from creosote and pentachlorophenol in surface and subsurface soils and sediment. Arsenic was also elevated in subsurface soils. Although it has not been characterized, groundwater contamination has not been found. Groundwater is shallow (within 20 feet of the surface), and the basalt bedrock is near the surface. The nearby waterways are potentially the most impacted and further study is recommended. Under a consent order with the port and Pope and Talbot, ODEQ is investigating the site.

A Remedial Investigation is scheduled to begin in January 1996 to characterize the site. According to Jill Kiernan, ODEQ project manager, ODEQ is not likely to support filling the site without more site information. Hydrofilling the site will add significant mass and water above the contaminated soil and may further drive contamination into groundwater and surface water and sediments. For this reason use of the site for this project could cause the Corps to be liable and does not appear viable. Potential liability for the Corps would discourage use of the site unless the Port accepts all liability provided clean material is placed at the site. If insulated from liability, Corps involvement in the remediation could benefit the landowner and project. This use of the site may increase the land value.

In a conversation with Jill Kiernan, ODEQ site manager on 15 October 1996, she confirmed that the port and Pope and Talbot are in the middle of a Remedial Investigation at the site, having sampled groundwater, soil and sediment. Jill indicated there was significant subsurface contamination over the site with a DNAPL layer in groundwater. The Remedial Investigation is scheduled to be complete in the fall of 1997.

C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA:

A. Description: The site is 34 acres on a low lying flood plain at the mouth of Milton Creek on Multnomah Channel one mile south of St. Helens, Oregon. The former wood treating facility is bounded to the northwest by the railroad spur serving this and the Boise Cascade site, to the southwest by Milton Creek, and to the Southeast by Multnomah Channel. The site is sparsely vegetated and is currently used to store pipeline dredging equipment. The surrounding area is industrial with a paper mill to the north, an auto wrecking yard across the creek, and open wooded space to the west with some residences. Multnomah Channel drains into the main stem Columbia River one mile below the site.

From 1919 to 1959 Pope and Talbot operated a wood treating facility on site using creosote, pentachlorophenol, and arsenic and chromium based solutions to treat railroad ties, utility poles and lumber. Several large tanks and numerous small tanks were located near the waterfront and a pipeline was used to off load creosote from ships in the Multnomah Channel. Portions of the pipeline are still observed on site. Much of the site area was used for storage of product. Creosote, pentachlorophenol and chromium arsenate were used at the site.

In 1963 the site was sold to the Port of St. Helens who still owns the property.

From 1974 until 1990, Niedermeyer-Martin leased the site and operated a log stripping facility on site, removing bark from raw fir logs. A maintenance shop with two underground tanks for diesel and gasoline were on site including above ground tanks for waste oil. Waste oil was used on site for dust control, and some may possibly have been disposed behind the shop.

- **B.** Structures: One building remains on site, which is the maintenance building from Niedermeyer-Martin occupation. Remnants of the ship pier are on the site and the creosote pipeline can be seen crossing the site from the pier at the downstream end to the upstream upland side of the site. A fence surrounds the southern third of the site. A bridge crossing Milton Creek is at the south end of the site. Railroad tracks form the western boundary of the site.
- C. Topography and Aspect: The site is flat and about 10-15 feet MSL. Some fill on site has raised the elevation about 5 feet above the surrounding wetland floodplain. The site is Columbia River floodplain, unprotected by levees. The site was completely underwater during February 1996 flooding. The site is oblong tending northeast to southwest.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: Local power and telephone lines serve the site. An old creosote pipeline used to offload creosote from ships for use on site crosses it.

- E. Access (roads, trails, other): Access to the site is along Railroad Road from Old Portland Road in south St. Helens, Oregon. The site is at the end of the road, crossing Milton Creek by bridge to the south end of the site. The Port of S. Helens has keys to access the locked gate.
- F. Mining Activity: None
- II. POTENTIAL HAZARDOUS WASTE PROBLEMS
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: No containers were seen on site at the time of the site visit. Adjacent properties with potential problems were not visited. The Boise Cascade paper mill operated a landfill just across the railroad tracks to the north. The C&R Wrecking Company across the creek has not been investigated.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: The site had little vegetation except berry vines around the edges and scotch broom in a few on site locations. Surrounding wetland plants did not appear stressed.
- D. Commercial Activity/Occupancy: Site not used except for storing dredging equipment.
- E. Unusual Seepage: None observed. No sheen was observed on the shoreline, but only two areas of the shoreline were closely inspected.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- **J. Discolored or disturbed soil areas:** Surface soils did not appear to be discolored. Gravel and dredged sand was the top layer of soil.
- K. Sewage or Septic Systems: Unknown
- L. Petroleum Products (Oil/Gas storage facilities): The site was the location of several large tanks of wood treating creosote and other chemicals. No evidence of the tanks was visible. The underground storage tank on site was decommissioned. Unresolved contamination associated with oil management remains.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, etc.): No known usage.
- N. Transformers: Associated with local service on power poles.
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: Confirmed creosote and pentachlorophenol contamination in sediments subsurface soils and groundwater continues to be investigated by the current owner and former operator of the site under a state lead cleanup program. A Remedial Investigation and Feasibility Study is ongoing. The nature and extent of contamination is not expected to be defined until fall of 1997 with any decisions on remedial actions at least a year after that. Recommendations include:

- 1. Monitoring of the investigation, results, and selected remedial action.
- 2. Contact EPA, the State of Oregon, and the owner concerning the potential to include the site as part of a brownfield remedial action.
- 3. Pursue insulation of the Corps of Engineers from liability should dredged material from the proposed project be used at the site.

O-86.2, Sand Island, St. Helens, Oregon

Completed by Michael Gross, 17 March 1995, revised 6 November 1996

Recommendations. No evidence of hazardous materials affecting or affected by dredged material disposal. Acquire rights for disposal without further investigation.

Regulatory Records. Date(s) of records search 8 December 1995

- **A. Environmental Protection Agency:** <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites on Sand Island. Several nearby sites in St. Helens have been evaluated under CERCLIS. No sites are expected to affect Sand Island.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List. In St. Helens there are 44 active tanks.
- 2. <u>Oregon UST Cleanup List</u>. There are 4 unresolved underground storage tank removals in St. Helens, but all are on Hwy 30.
- 3. <u>Oregon Environmental Cleanup Site Information System</u>. There are several sites in St. Helens immediately across the river including the Boise Cascade paper mill and the Port of St. Helens Creosote site. These are not expected to affect the site.
- C. Washington Department of Ecology: 1) Washington UST List. In Woodland, there are 48 active underground storage tanks or unresolved tank problem sites. None are near the site.
- 2) Washington Confirmed and Suspected Contaminated Sites List. In Woodland there are 4 sites with known contamination. All are in central Woodland more than four miles from the site. None are expected to affect this site.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA.

- **A. Description:** This site is a river bar island located in the center of the Columbia River immediately east of St. Helens, Oregon, downstream of Sauvie Island. The island is mostly covered by cottonwood forest. A marine park and day use marina are located on the west shore that sees heavy use in the summer. The upstream end of the island is an approved dredged material disposal site for beach nourishment. The disposal site is approximately 28 acres. The island is approximately 50 acres.
- B. Structures: Structures include several pile dikes and piling and docks for the marina.
- C. Topography and Aspect: The site is roughly oblong in shape tending north and south, and is relatively flat. The site slopes from 20 feet on the south and east shore to 10 feet on the west shore. There are steep, erosive faces to sand disposal areas on the east side of the island.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site.
- E. Access (roads, trails, other): There are no roads on the site. Access is by boat.
- **F.** Mining Activity: None on the subject property.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- **D.** Commercial Activity/Occupancy: The marina activity is a local public land use. The docks are the only improvements.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: The marina uses chemical toilets.
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of hazardous materials or waste activities are evident. Acquire rights for disposal of dredged material without further investigation.

W-86.5, Austin Point, Mouth of the Lewis River, Woodland, Washington Completed by Michael Gross, 17 March 1995, revised 4 November 1996

Recommendations. No known potential contamination exists at the site. Acquire rights for disposal of dredged material without further investigation.

Regulatory Records. Date(s) of records search 8 December 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Woodland under CERCLIS.
- B. Oregon Department of Environmental Quality: Not applicable. The site is in Washington.
- C. Washington Department of Ecology: 1. Washington UST List. In Woodland, there are 48 active underground storage tanks or unresolved underground storage tank problem sites. None are near the site.
- 2. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. In Woodland there are 4 sites with known contamination. All are in central Woodland more than three miles from the site. None are expected to affect this site.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA

- A. Description: This site is a 54 acre parcel of cottonwood forest, beach and former dredged material disposal area used as a beef cattle feed lot, and since the site visit is being used as a truck driver training school. The site was used for dredged material disposal at one time, but has had no disposal lately except to level the site for the truck driver school. Use as a feed lot has been within the last five years. The site is located on the north shore of the mouth of the Lewis River in Cowlitz County, Washington, and is owned by the Port of Woodland. The site is bounded to the south by the Lewis River, to the west by the Columbia River and to the east by the levee and road. Much of the undergrowth is lost and many of the cottonwoods are damaged or dead due to use as a feed lot. A portion of the site is used as a campground, but there are no facilities.
- B. Structures: No structures are on the site beside a cattle loading ramp, fences and feed trough.
- C. Topography and Aspect: The site is roughly triangular in shape and relatively flat. From the levee top at approximately 30 feet above MSL the site slopes gently to the beach. Several mounds and humps denote areas of past dredge fill activity where the site was used for beach nourishment.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site. A roadside powerline is along the dike access road.
- E. Access (roads, trails, other): Access is from the Woodland Dike Access Road southwest from Woodland. Roads on site are restricted to dirt tracks.
- **F.** Mining Activity: None on the subject property.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- B. Grazing/Logging Activities: The site is used as a feed lot for beef cattle.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Feed lot activities have damaged undergrowth and trees. Dredge fill has covered and damaged some vegetation.
- D. Commercial Activity/Occupancy: The campground activity appears to be informal.
- E. Unusual Seepage: None observed.
- F. Solid Waste: No unusual piles of solid waste were observed. Some garbage and debris from the campground area may require removal.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None except in feed lot areas.
- K. Sewage or Septic Systems: No apparent sewage facilities.
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None observed.
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of hazardous materials affecting or affected by dredged material disposal. Acquire rights for disposal without further investigation.

REACH 3 SITES

W-82.0, Martins Bar, Woodland, Washington Completed by Michael Gross, 17 March 1995, revised 26 November 1996

Recommendations. No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 8 December 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Woodland under CERCLIS.
- B. Oregon Department of Environmental Quality: Not applicable. The site is in Washington.
- C. Washington Department of Ecology: 1. Washington UST List. In Woodland, there are 48 active underground storage tanks or unresolved tank problem sites. None are near the site.
- 2. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. In Woodland there are four sites with known contamination. All are in central Woodland more than three miles from the site. None are expected to affect this site.

Hazardous Materials Field Examination. Date of inspection 19 January 1996

I. GENERAL PHYSICAL DATA.

- **A. Description:** This site is a 67-acre parcel of riparian cottonwood forest, open space and grassland on the riverward side of the levee in Woodland Bottoms. The site was previously a dredged material disposal site. The site is immediately downstream of a mobile home park, west of the levee road and upstream of undeveloped land and Burke Slough. The site varies in elevation indicating uneven use as a disposal site in past.
- **B. Structures:** No structures are on the site beside barbed wire fence.
- C. Topography and Aspect: The site is roughly rectangular, tending north and south. The site has rolling topography, varying between 10 and 25 feet MSL. The mounded topography is caused by past disposal of dredged material. The original topography was 10 feet MSL. The eastern edge of the site is bounded by the Woodland Drainage District levee and Dike road at 300 feet MSL, tending to water level at the beach.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site. A roadside powerline is along the dike access road.
- E. Access (roads, trails, other): Access is from the Woodland Dike Access Road west from Woodland. Roads on site are restricted to dirt tracks.
- F. Mining Activity: No evidence of dredged material mining on the subject property.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None

- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Dredge fill has covered and damaged some vegetation.
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: No apparent sewage facilities.
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None observed.
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination from hazardous materials affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

O-82.6, Reichold, Columbia City, Oregon

Completed by Michael Gross, 17 March 1995, revised 3 January 1997

Recommendations. The site is crossed by an ammonium nitrate pipeline, which must be relocated for full disposal over the site. Recommend verification of site contamination by nitrates prior to acquisition of disposal rights.

Regulatory Records. Date(s) of records search 13 December 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated the Chevron Chemical site with a site visit in 1980. Their report noted wastes the liquid ammonia fertilizer plant produced include catalysts, silica gel, liquid ethanolamine. The report noted some waste piles of activated carbon and oily waste were shipped off site. EPA did not propose additional federal action.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List. In Deer Island there are seven active tanks. These tanks are associated with stores along or near Highway 30, away from the disposal area. There are no active tanks in Columbia City. There are 36 active tanks in St. Helens. None are near the site.
- 2. <u>Oregon UST Cleanup List</u>. There are no unresolved underground storage tank removals in Deer Island. There are seven unresolved tank cleanups in St. Helens. All are far from the site.
- 3. Oregon Environmental Cleanup Site Information System. The Chevron (Reichold) plant is on the ECSI (No. 1013). No entries are in the ODEQ file since 30 Sep 94. At that time, ODEQ was reviewing independent cleanup action by the plant owner. In a conversation with Jill Kiernan, ODEQ on 6 Jan 97, she confirmed the site is a low priority for ODEQ. The file indicates that operational spills of liquid fertilizer since the plant began operating had contaminated groundwater with nitrates. The plant owner has installed recovery wells and began a pump and treat operation which applied water to nearby fields. In discussing the operation with the current operator of the plant (Harold Nelson, Coastal St. Helens, 6 Jan 97), pumping of groundwater continues. The plume is confined to the property boundary and concentrations have reduced enough that discharge is routed directly to the river through the NPDES permitted discharge.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 January 1996

I. GENERAL PHYSICAL DATA:

A. Description: The proposed disposal site is a former lowland beach on the Columbia River which has been filled with approximately 20 feet of dredged material. The site to be filled is 53 acres, is immediately upriver of Deer Island and is bisected by a paved road, which leads to a ship pier in the river. An 8-inch liquid fertilizer pipeline runs above ground to the pier from the fertilizer plant which is across Highway 30 and the railroad. The highway and railroad are at least 20 feet above the disposal site. The site is ringed by riparian forest on three sides.

The ammonium fertilizer plant has been in operation since before 1972 and has run under the ownership of Shell (up to 1972), Reichold (until 1987), Chevron (until 1996) and Coastal St. Helens. The disposal site is currently owned by Reichold. The fertilizer plant is approximately 500 feet west of the disposal site and 20 feet higher in elevation. The site uses groundwater for process and drinking water.

- **B. Structures:** A wood piling pier with loading facilities for liquid fertilizer is on the eastern edge of the site. The pier is served by water for fire and a paved road. A pipeline for the fertilizer is above ground, crossing the site to the west. A main railroad line is east of the site, and a locked fence marks the eastern site boundary. The fertilizer plant is served by groundwater
- C. Topography and Aspect: The site was originally a beach and riparian forest at about 10 feet MSL. The site was filled to about 30 feet MSL over much of the site by maintenance dredging. The overall site shape is oblong tending north to south. The eastern boundary rises steeply to a bench at 60 feet MSL where the railroad and highway are located. The fertilizer plant is on the bench at about 70 feet MSL.
- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** No powerlines are on site. The 8-inch fertilizer pipeline crosses the site on the surface adjacent to a paved road. Two water lines are buried beneath the road, one serving the pier for fire fighting, the other an outfall for cooling water from the plant. The buried pipes will not require relocation.
- E. Access (roads, trails, other): Access to the disposal site is from Highway 30 on a paved road that crosses the site tot he pier. A locked gate is at the top of the topographic bench.
- F. Mining Activity: None

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None on the disposal site. The fertilizer plant was not visited and likely has numerous containers with hazardous materials.
- B. Grazing/Logging Activities: None on site. There is pasture adjacent and north of the fertilizer plant.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- **D.** Commercial Activity/Occupancy: The site is crossed by the road and pipeline for the fertilizer pier.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None

M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): There is potential for leakage or spillage of ammonium fertilizer on the disposal site itself.

N. Transformers: None

O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: The site has the potential for contamination from the pipeline. Disposal on the site will require relocation of the above ground pipeline. Disposal of material is unlikely to affect or be affected by groundwater concerns. Recommend collecting surface soil samples on site to determine whether contamination from the pipeline exists and determine baseline condition of the site.

W-82.0, Woodland Bottoms, Woodland, Washington (Mitigation) Completed by Michael Gross, 17 March 1995, revised 4 November 1996

Recommendations. No known potential contamination exists at the site. Acquire rights for disposal of dredged material without further investigation.

Regulatory Records. Date(s) of records search 8 December 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Woodland under CERCLIS.
- B. Oregon Department of Environmental Quality: Not applicable. The site is in Washington.
- C. Washington Department of Ecology: 1. Washington UST List. In Woodland, there are 48 active underground storage tanks or unresolved tank problem sites. None are near the site.
- 2. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. In Woodland, there are four sites with known contamination. All are in central Woodland more than three miles from the site. None are expected to affect this site.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA:

- A. Description: This is a 67.8-acre site on riverward side of levee in Woodland Bottoms. The site is previous disposal site currently open space, riparian forest and grassland. Currently approximately 44 acres are slated for material disposal. The site is immediately downstream of a mobile home park, west of the levee road and upstream of undeveloped land. Site has riparian forest and is variable in elevation indicating uneven use as disposal site in past. No evidence of HTRW was observed at the site visit.
- B. Structures: None on site.
- C. Topography and Aspect: The site is roughly rectangular in shape and relatively flat. From the levee top at approximately 30 feet above MSL the site slopes gently to the beach. Several mounds and humps denote areas of past dredge fill activity where the site was used for beach nourishment.
- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** No powerlines are on site. A roadside powerline is along the dike access road.
- E. Access (roads, trails, other): Access is from the Woodland Dike Access Road west from Woodland. Roads on site are restricted to dirt tracks.
- F. Mining Activity: None on the subject property.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- B. Grazing/Logging Activities: None

- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Dredge fill has covered and damaged some vegetation.
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed.
- F. Solid Waste: No unusual piles of solid waste were observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None except in areas of past dredge material disposal.
- K. Sewage or Septic Systems: No apparent sewage facilities.
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None observed.
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of hazardous materials affecting or affected by dredged material disposal. Acquire rights for disposal without further investigation.

Burke Island, Woodland, Washington. Completed by Michael Gross. 7 January 1997

Recommendations: No evidence of hazardous materials affecting or affected by dredged material disposal. Acquire rights for disposal without further investigation.

Regulatory Records. Date(s) of Records Search: 8 December 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Woodland under CERCLIS.
- B. Oregon Department of Environmental Quality: Not applicable. The site is in Washington.
- C. Washington Department of Ecology: 1. Washington UST List. In Woodland, there are 48 active USTs or unresolved UST problem sites. None are near the site.
- 2. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. In Woodland there are 4 sites with known contamination. All are in central Woodland more than three miles from the site. None are expected to affect this site.

Hazardous Materials Field Examination. Date of Inspection: 8 December 1995

- A. Description: Burke Island is a 164 acre island on the Washington side of the Columbia River between Woodland and Kalama at river mile 81. The site is currently used for corn and hay farming and is proposed for use as a wildlife mitigation site. The north half of the site is native riparian forest. The island is a flat alluvial bar island at about 10 feet MSL with riparian forest and cropland. A small bridge connects the island to the mainland. The site was not visited, but observed from the shore. No evidence of HTRW was seen at the site visit. The site has been used as an agricultural cropland and undeveloped riparian forest for many years.
- B. Structures: One single lane steel bridge connects the site with the mainland at the south end.
- C. Topography and Aspect: The site is a flat oval shaped bar island at about 10 feet MSL. A slough or inlet is in the north half.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site.
- E. Access (roads, trails, other): Access is by a bridge from the dike access road.
- F. Mining Activity: None on the subject property.
- II. POTENTIAL HAZARDOUS WASTE PROBLEMS:
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None.
- D. Commercial Activity/Occupancy: None.
- E. Unusual Seepage: None observed

- F. Solid Waste: No unusual piles of solid waste were observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: No apparent sewage facilities.
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): Probable use of some agricultural chemicals on corn and hay crops.
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of hazardous materials affecting or affected by dredged material disposal. Acquire rights for use without further investigation.

W-80.0, Martin Island, Woodland, Washington

Completed by Michael Gross, 17 March 1995, revised 7 January 1997

Recommendations. Identify level of lead based paint and asbestos in house on-site prior to acquisition. Acquire rights for disposal of dredged material without further investigation.

Regulatory Records. Date(s) of records search 8 December 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Woodland under CERCLIS.
- B. Oregon Department of Environmental Quality: Not applicable. The site is in Washington.
- C. Washington Department of Ecology: 1. Washington UST List. In Woodland, there are 48 active underground storage tanks or unresolved tank problem sites. None are near the site.
- 2. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. In Woodland, there are four sites with known contamination. All are in central Woodland more than three miles from the site. None are expected to affect this site.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- A. Description: Martin Island is a 350-acre island on the Washington side of the Columbia River channel between Woodland and Kalama at river mile 80. The proposed disposal site covers approximately 231 acres of upland farmland on site. The remainder of the island is proposed for wildlife mitigation. The island is an alluvial bar island with riparian forest around its borders and eastern interior, cropland where the proposed disposal is located, and one house, centrally located. A log storage lagoon was dredged in the 1980s on the eastern side of the island with an outlet to the east. Dolphins for anchoring log rafts are in the lagoon and in Martin Slough. The site is riverward of the north end of Woodland Bottoms and Martin Slough. The riverward shore has been used as a beach nourishment site. Site is relatively flat in elevation, at about 10 feet MSL, with the house on the high point. The site was not visited, but observed from the shore. No evidence of HTRW was seen at the site visit. The house may be painted with lead based paint and will require abatement during demolition. The site has been used as an agricultural cropland and undeveloped riparian forest for many years. The log raft storage pond was installed in the 1980s.
- **B. Structures:** One small wood frame house older than 40 years is on site. A well probably serves the house, but there is no ready land access.
- C. Topography and Aspect: The site is a flat triangular shaped bar island at about 10 feet MSL. An approximately 50-acre log pond was excavated in the east side of the island. Material excavated was likely placed on site.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site.
- E. Access (roads, trails, other): None by land.
- F. Mining Activity: None on the subject property.

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None.
- D. Commercial Activity/Occupancy: None.
- E. Unusual Seepage: None observed
- F. Solid Waste: No unusual piles of solid waste were observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: The house likely has a septic system.
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): Probable use of some agricultural chemicals on corn and hay crops.
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: The house probably has lead containing paints and asbestos. No other evidence of hazardous materials requiring investigation. Sediments in the log pond are likely covered with wood bark. Recommend a survey of the structure for lead and asbestos prior to acquisition. Recommend no disturbance of sediments in the log pond which would raise the TOC and BOD level in the water. No additional investigations are necessary.

O-80.5, Morse Bros. Gravel Pit, Deer Island, Oregon

Completed by Michael Gross, 17 March 1995, revised 7 January 1997

Recommendations. Review site maintenance processes and visit site if to be acquired for material disposal. If the site will remain in current operation and will be used as a rehandle site, no additional sampling is necessary.

Regulatory Records. Date(s) of records search 6 January 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated the Chevron Chemical site, which is 3 miles upstream of this site and has recommended no further action.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List. In Deer Island there are seven active tanks. These tanks are associated with stores along or near Highway 30, across the road from this site.
- 2. Oregon UST Cleanup List. There are no unresolved UST removals in Deer Island.
- 3. <u>Oregon Environmental Cleanup Site Information System</u>. Other than the Chevron fertilizer plant south of Deer Island (Reichold), no sites near the site are on the ECSI.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- A. Description: This site is a 220 acre active gravel mine between the railroad and Highway 30 on the west and Deer Island Slough on the east in Deer Island, Oregon. The site is on lowland that is being actively mined for gravel. Approximately one third of the total area is committed to mining operations, the remainder is open grassland. Cottonwood trees border the site on two sides and near water. About 5 pits are active, new, or abandoned. The site is crossed by at least one slough and is bordered on the east by Deer Island Slough, and to the north by a creek. The mining operation uses dragline and a conveyor sorting system. Gravel is truck hauled from the site.
- **B. Structures:** A tower dragline structure is one site with a grizzly and conveyor system. Office buildings are trailers. A locked fence is along the access road.
- C. Topography and Aspect: The site is on floodplain at 20 feet MSL. A levee separates the site from the creek, but the slough floods into the site at high water. The site is a long narrow triangular shaped plot with the narrow end to the south. Topography to the west beyond the highway at the community of Deer Island is a terraced portion of the floodplain at about 40 feet MSL. Immediately to the west (within 500 feet of the site) rises the coast mountain range.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site. Local power is along the highway and in the town of Deer Island.
- E. Access (roads, trails, other): Access to the disposal site is from Highway 30 along a road to the gravel operation.
- **F.** Mining Activity: The site has been mined for gravel since 1979. Prior to that the site was pasture.

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The site was not visited. Potential exists for containers for equipment maintenance operations for loaders and dragline/conveyor system.
- **B.** Grazing/Logging Activities: None at present. The site was used as pasture in the past. The prevailing land use in surrounding area and Deer Island itself is beef cattle grazing. On the coast range are logging activities.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- **D.** Commercial Activity/Occupancy: The site is actively mined by Morse Bros. The community of Deer Island is to the west across the railroad and highway.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: New areas have been stripped of topsoil and soil is stockpiled. The areas are presumably being readied for mining.
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): Adjacent gas stations across the highway contain active underground storage tanks. None are registered on site. A site visit was not made so above ground facilities may be present.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: The site may have the potential for contamination from equipment maintenance operations from the mining. Recommend a site visit and sampling if evidence of petroleum contamination exists. If the site will be used as a sediment rehandle operation rather than acquisition, no additional sampling is recommended.

O-77.0 Deer Island, Deer Island, Oregon

Completed by Michael Gross, 17 March 1995, revised 13 December 1996

Recommendations. One drum of unknown contents was found on the beach at the site. The drum should be verified removed prior to acquisition of rights to dispose dredged material.

Regulatory Records. Date(s) of records search 8 December 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated the Chevron Chemical site which is on the Oregon shore 5 miles upstream of this site and has recommended no further action. Sites in Washington are not hydraulically connected due to the Columbia River and were not considered.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List. In Deer Island there are 7 active tanks. These tanks are associated with stores along or near Highway 30, away from the disposal area.
- 2. <u>Oregon UST Cleanup List</u>. There are no unresolved underground storage tank removals on Deer Island.
- 3. <u>Oregon Environmental Cleanup Site Information System</u>. Other than the Chevron fertilizer plant south of Deer Island (Reichold), no sites near the site are on the ECSI.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- A. Description: This site is a river bar island located on the Oregon shore of the Columbia River downstream of Columbia City and upstream of Kalama, Washington. The island is connected to the mainland and protected from flooding by the Deer Island Drainage District levee system. The 5-mile long island is mostly covered by grasses with wetland and some cottonwood forest. The location of the proposed disposal site is riverward of the levee toward the downstream end of the island. A portion of this area has been previously used as a dredged material disposal site. This area is sparsely vegetated with grasses and scotch broom. The local residences have borrowed sand material from the disposal site leaving an open excavation. The area proposed for fill is 61 acres and is bound on the west by the levee and the east by the river.
- **B. Structures:** No structures are on the disposal site. The island contains cattle ranches with associated buildings and residences. The closest structure to the disposal site is the drainage district pump station immediately inboard of the levee.
- C. Topography and Aspect: The island is naturally at approximately 10 feet MSL rising to about 30 feet MSL on the surrounding levee. The disposal site is mounded up to 15 feet with dredged material but is similar to the remainder of the island. The disposal site is located adjacent to the main channel of the river.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site. The pump station is served by above ground power with transformers immediately adjacent to the building.

- E. Access (roads, trails, other): Access to the disposal site is from the levee road which is only accessible through locked gates on the Christiansen ranch.
- **F.** Mining Activity: The previously disposed sand is occasionally mined by deer island residences.

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: One 55 gallon rusted drum was seen lying on its side on the beach at the upstream end of the site. No labels were visible, but the drum was not closely observed.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: One drum of unknown contents appears to have floated onto the site during flooding. This drum could contain hazardous materials that may have spilled on site. Recommend having the contents of the drum investigated, the drum removed and the soil in the location of the drum sampled prior to acquiring rights for disposal of dredged material.

O-75.8 Sandy Island, near Deer Island, Oregon

Completed by Michael Gross, 17 March 1995, revised 26 November 1996

Recommendations. No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 8 December 1995

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated the Chevron Chemical site which is on the Oregon shore 8 miles upstream of this site and has recommended no further action.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List. In Deer Island there are 7 active tanks. Deer Island is about 5 miles upstream of the site.
- 2. <u>Oregon UST Cleanup List</u>. There are no unresolved underground storage tank removals on Deer Island.
- 3. <u>Oregon Environmental Cleanup Site Information System</u>. Other than the Chevron fertilizer plant south of Deer Island (Reichold), no sites near the site are on the ECSI.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- A. Description: This site is a river bar island located in the center of the Columbia River immediately downstream of Deer Island on the Oregon shore and across the main channel from Kalama, Washington. The island is mostly covered by cottonwood forest and wetland. The southern portion of the island has been previously used as a dredged material disposal site. These areas are sparsely vegetated with grasses and scotch broom. The channel side of the island has been piled higher with material. A steep-eroded sand bank runs most of the length of the east side of the island. The upstream end is also a former disposal area but is more gently sloped. This area is 60 acres in size and is planned for disposal. The island is approximately 300 acres.
- B. Structures: No structures are on the island.
- C. Topography and Aspect: The island is naturally at about 10 feet MSL rising to about 30 feet MSL on the east bank due to dredged fill beach nourishment. The island is a football shaped island in the center of the river on the Oregon side. The disposal site is between 15 and 20 feet MSL.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site.
- E. Access (roads, trails, other): There are no roads on the site. Access is by boat.
- F. Mining Activity: None on the subject property.
- I. POTENTIAL HAZARDOUS WASTE PROBLEMS:
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None

- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

W-73.5, Peavey Railroad Oval, Kalama, Washington Completed by Michael Gross, 17 March 1995, revised 3 January 1997

Recommendations. No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 2 December 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Kalama under CERCLIS.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. In Kalama, there are 17 active underground storage tanks. Several are near the site.
- 2. <u>Washington LUST List</u>. Two leaking underground storage tanks in Kalama are waiting cleanup. Neither is near the site. A leaking tank at the Peavey Terminal was cleaned up in 1993.
- 3. Washington Confirmed and Suspected Contaminated Sites List. There is one site at Kalama Chemical with confirmed metals and phenol soil and groundwater contamination that has not been fully assessed. This site is 2 miles upriver of the site. One other site in Kalama is not near the site.

Hazardous Materials Field Examination. Date of inspection 11 March 1996

- A. Description: The proposed disposal site is 43 acres within the railroad oval at the Peavey Grain Terminal on Port of Kalama land. The grain elevators are the only facility within the oval, and are located in the southwest portion of the oval. The remaining land is low lying and degraded wetlands. The site is on dredged fill and flat, at about 20 feet MSL except where filled to about 35 feet MSL at the elevators and railroad. The BNRR serves the oval and other port property.
- **B. Structures:** Several large grain elevators are in the southwest portion of the oval. The elevators are served by the railroad, which encircles the site. A ship loading pier and conveyor facility is on site at the west edge of the site. A small office building is south of the oval, with paved parking and truck loading facilities. There are two culverts beneath the oval for dredged filling and return water.
- C. Topography and Aspect: The site is naturally at approximately 10 feet MSL, but has been raised to approximately 20 feet MSL by filling with dredged material. The site is completely within the railroad oval, relatively flat and about 15 feet below railroad grade.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: Local service for utilities is on site. The oval is set up for pipeline dredging with two openings in the railroad embankment.
- E. Access (roads, trails, other): Access is from Hendrickson Road to the grain terminal.
- F. Mining Activity: None on the subject property.

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- **D.** Commercial Activity/Occupancy: A major grain shipping terminal with railroad oval and elevators has been operating on site for more than fifteen years.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: Local sewer service on site.
- L. Petroleum Products (Oil/Gas storage facilities): Underground fuel storage on site was removed. A leak at the tank location was cleaned up in 1993.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: Local service transformers are on site.
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

W-72.2/W-71.9, Northport, Kalama, Washington

Completed by Michael Gross, 17 March 1995, revised 3 January 1997

Recommendations. No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 2 December 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Kalama under CERCLIS.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. In Kalama, there are 17 active underground storage tanks. Several are near the site.
- 2. <u>Washington LUST List</u>. Two leaking underground storage tanks in Kalama are awaiting cleanup. Neither is near the site. A leaking tank at the Peavey Grain Terminal was cleaned up in 1993.
- 3. Washington Confirmed and Suspected Contaminated Sites List. There is one site at Kalama Chemical with confirmed metals and phenol soil and groundwater contamination that has not been fully assessed. This site is 2 miles upriver of the site. One other site in Kalama is not near the site.

Hazardous Materials Field Examination. Date of inspection 11 March 1996

- A. Description: The proposed disposal site is 50 acres at the north end of Port of Kalama development, north of the Kalama River mouth. The site is dredge filled from the Mt. St. Helens Recovery and is relatively flat and sparsely vegetated at approximately 30 feet MSL. Riparian forest is nearby on the shoreline. The site is adjacent to development of a new steel mill currently under construction immediately to the south.
- **B. Structures:** There are no structures on the site. The steel rolling mill under construction includes rail spur, shipping pier and the structure on pilings.
- C. Topography and Aspect: The site is naturally at approximately 10 feet MSL, but has been raised to approximately 30 feet MSL by filling with dredged material. Much of the filling is proposed to occur on previously filled land riverward and north of the mill. Riparian forest marks the northern boundary of the site.
- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** Local service for utilities is on site. New power for the steel mill is being constructed. Water and sewer serve the mill site.
- E. Access (roads, trails, other): Access is from I-5 at Kalama River Road.
- F. Mining Activity: None on the subject property.

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- **D.** Commercial Activity/Occupancy: The steel mill is the only development nearby. It is schedule to begin operation in 1997 or 1998.
- E. Unusual Seepage: None observed
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: Local sewer service on site
- L. Petroleum Products (Oil/Gas storage facilities): None on site.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: Local service transformers are on site.
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

W-70.1, Cottonwood Island, near Longview Washington Completed by Michael Gross, 17 March 1995, revised 2 January 1997

Recommendations. No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 2 December 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated several sites in Longview. All sites are downstream and separate from Cottonwood Island by the Cowlitz River channel and Carrolls Channel.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. In Longview, there are 164 active underground storage tanks or unresolved tank problem sites. None are near the site.
- 2. <u>Washington LUST List</u>. There are 62 tanks in Longview either awaiting cleanup or with cleanup started. All are hydraulically separated from Cottonwood Island.
- 3. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. In Longview, there are 35 sites with known contamination. All are hydraulically separated from Cottonwood Island.

Hazardous Materials Field Examination. Date of inspection 11 March 1996

- **A. Description:** This site is a river bar island located in the center of the Columbia River immediately upstream of the mouth of the Cowlitz River at Longview, Washington. The site is on the Washington side of the shipping channel. Most of the island is covered by up to 20 feet of dredged fill, placed there after the eruption of Mt. St. Helens in the early 1980s. This material is sparsely vegetated with grasses and scotch broom. The few areas not covered by dredged material have wetlands and riparian forest. These areas are at the center of the site and near the eastern fringes. The channel side of the island has steep eroded banks of sand. The island, combined with Howard Island during dredge filling, is approximately 600 acres. Approximately 265 acres are proposed for additional dredged fill material.
- B. Structures: No structures are on the island
- C. Topography and Aspect: The island is naturally at approximately 10 feet MSL rising to about 30 feet MSL over most of the island due to dredged fill. The majority of the fill is on the channel side of the island with the eastern side near original topography. The island is roughly boomerang shaped, located on a bend in the river where the river tends from north to northwest.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site.
- E. Access (roads, trails, other): There are no roads on the site. Access is by boat.
- F. Mining Activity: None on the subject property.

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: A few small containers of motor oil and brake fluid which appeared empty were found on the beach shortly after the February 1996 floods. No other containers were found.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed.
- F. Solid Waste: Some floating debris was noted on the beach.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

REACH 4 SITES

W-68.7, Howard Island, near Longview Washington Completed by Michael Gross, 17 March 1995, revised 2 January 1997

Recommendations. No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 2 December 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated several sites in Longview. All sites are downstream and separate from Howard Island by the Cowlitz river channel and Carrolls Channel.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. In Longview, there are 164 active underground storage tanks or unresolved tank problem sites. None are near the site.
- 2. <u>Washington LUST List</u>. There are 62 tanks in Longview either awaiting cleanup or with cleanup started. All are hydraulically separated from Cottonwood Island.
- 3. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. In Longview, there are 35 sites with known contamination. All are hydraulically separated from Cottonwood Island.

Hazardous Materials Field Examination. Date of inspection 11 March 1996

- A. Description: This site is a river bar island located in the center of the Columbia River immediately upstream of the mouth of the Cowlitz River at Longview, Washington. The site is on the Washington side of the shipping channel. Most of the island is covered by up to 20 feet of dredged fill, placed there after the eruption of Mt. St. Helens in the early 1980s. This material is sparsely vegetated with grasses and scotch broom. The few areas not covered by dredged material have wetlands and riparian forest. These areas are at the center of the site and near the eastern fringes. The main channel side of the island has steep eroded banks of sand. The island, combined with Cottonwood Island during dredge filling, is approximately 600 acres. Approximately 265 acres are proposed for additional dredged fill material.
- **B. Structures:** No structures are on the island other than navigational aides. Several pile dikes extend toward the channel from the island.
- C. Topography and Aspect: The island is naturally at approximately 10 feet MSL rising to about 30 feet MSL over most of the island due to dredged fill. The majority of the fill is on the channel-ward side of the island with the eastern side near original topography. The island is roughly boomerang shaped, located on a bend in the river where the river tends from north to northwest.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site.
- E. Access (roads, trails, other): There are no roads on the site. Access is by boat.
- F. Mining Activity: None on the subject property.

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: A few small containers of motor oil and brake fluid which appeared empty were found on the beach shortly after the February 1996 floods. No other containers were found.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed.
- F. Solid Waste: Some floating debris was noted on the beach.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

W-67.5, International Paper Rehandle, Longview Washington Completed by Michael Gross, 17 March 1995, revised 4 February 1997

Recommendations. No evidence of contamination affecting the site for continued use as rehandle site. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 2 December 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated two sites in Longview. The Longview Fibre Landfill is approximately ½ mile northeast of the site. This unlined landfill contains paper manufacturing wastes and is closed. The monitoring is being overseen by Ecology. The Weyerhaeuser site is about 1.0 miles downstream of the International Paper site.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. In Longview, there are 136 operational underground storage tanks. Approximately 40 tanks are within 2 miles of the site.
- 2. <u>Washington LUST List</u>. There are 62 tanks in Longview either awaiting cleanup or with cleanup started. Fifteen are within 2 miles of the site. One is on the adjacent Longview Fibre site awaiting cleanup.
- 3. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. In Longview, there are 13 sites with known contamination. Those nearest to the site are as follows:
- Cowlitz County SLF (1079). Northeast of the site, an active landfill that is monitoring for groundwater contamination. Likely hydraulically separated from this site by the log pond.
- ♦ International Paper Sites (1080/1081). The International Paper property is 500 yards north of the rehandle site and has confirmed soil and groundwater contamination for phenols and PAHs. The site is being investigated by the state under RCRA.
- ♦ Longview Switching Co. (1099). This site has confirmed POL contamination in soil.
- ♦ Chevron USA (1101). This site has confirmed groundwater contamination but is about one mile downstream from the site.
- ♦ Longview Fibre (31). This site has a closed paper waste landfill with confirmed metals contamination in groundwater.

Other sites are within two miles of the site.

4. <u>Hazardous Sites List.</u> Chevron USA, Gardner Forest Products, Ostrander Rock Disposal, West Coast Mobil Oil, Longview Fibre, Weyerhaeuser, and Reynolds Metals are all sites in Cowlitz County on the list. These sites are in remedial action or awaiting a RA.

Hazardous Materials Field Examination. Date of inspection 11 March 1996

I. GENERAL PHYSICAL DATA:

A. Description: This site is developed as a dredged material disposal site on land formerly used as a lumber yard. The site is surrounded by a 1,250-foot by 1,000-foot sand levee with drainage culvert for pipeline dredging. A preliminary assessment for this use was prepared in January 1996.

It indicates a 2-foot layer of wood compost beneath the sand and an abandoned fire main around the perimeter. A 1991 RCRA facility assessment found no contaminant issues on the site itself. The site is adjacent to a portion of Longview Fibre land to the east with similar land use. A wood chip pile is to the west. The river is to the south with a loading facility for wood chips. A former disposal area with PAH contamination is to the north.

- **B.** Structures: On the immediate site there are no structures other than a fence to the east and pier and loading facilities tot he west and south.
- C. Topography and Aspect: The site is flat, draining to the south and the river. The levee surrounds the site to a height of about 30 feet MSL with the riverward levee permanent. The site itself is about 10 feet MSL.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site. A fire main surrounds the site.
- E. Access (roads, trails, other): Access is from International Way through International Paper property.
- **F.** Mining Activity: The sand material dredged from the river is placed in the site. It is mined for use as fill on the International Paper property.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: No containers were observed on site.
- **B.** Grazing/Logging Activities: The site is a former lumber yard. Wood handling activities are to the north and west.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None.
- **D.** Commercial Activity/Occupancy: The site is occupied by International Paper who uses adjacent facilities for wood handling and shipping. The disposal site is currently used only for fill and borrow.
- E. Unusual Seepage: None observed.
- F. Solid Waste: Some wood compost (18 inches deep) from log storage is under the sand on site.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: The site is used for fill and borrow. Scrapers were removing sand material from the site at the time of the site visit.
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None

M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None

N. Transformers: None

O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: The site has potential for contamination from past use as a lumber yard, but is currently planned for continued use as a fill and borrow site under the same ownership. Provided use as a disposal site beyond the existing rehandle site boundaries does not occur, the site use should be continued without further investigation based on these findings and the findings of the 1996 PAS.

O-67.5, Rainier Beach, Rainier, Oregon. Completed by Michael Gross, 6 February 1997

Recommendations. Evidence of contamination from nearby UST potentially affecting the site. Acquire rights for dredged material disposal after review of UST investigation.

Regulatory Records. Date(s) of Records Search: 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Rainier under CERCLA.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List. (16 Jan 97) There are 23 active tanks in Rainier. Many of the tanks are within one mile of the site.
- 2. Oregon UST Cleanup List. (17 Oct 96) There are nine unresolved UST removals in Rainier. One of these is the marina, immediately east of the site. Two other sites are nearby in downtown Rainier. One site is the Former James River mill on Highway 30 at the foot of the bridge to Longview.
- 3. Oregon Environmental Cleanup Site Information System. (10 Sep 96) There are no sites in Rainier on the ECSI.
- C. Washington Department of Ecology: Not applicable

Hazardous Materials Field Examination. Date of Inspection: 8 December 1995

- A. Description: This site is a former dredged material disposal site riverward and d/s of the city park and sewage treatment plant in Rainier, Oregon. It extends to the existing log yard on the d/s end and u/s to the mouth of Fox Creek.. The site is a former disposal area, most of which was placed soon after the eruption of Mt. St. Helens in 1981-83. No development has occurred on the site other than STP construction. The site is sparsely vegetated. There is an unresolved UST at the marina (park). The 52 acre site is level at about 20 feet MSL with a steep beach.
- B. Structures: No structures are on the site.
- C. Topography and Aspect: The site was originally part of the river. The original shore was at the south edge of the site at the city park. During emergency dredging activity after the Mt. St. Helens eruption, the site was filled to its present state at about 20 feet MSL. The site is flat with a steep beach.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: An approximately 30 inch sewer outfall crosses the site and discharges to the river near the west end of the site.
- E. Access (roads, trails, other): There are no roads on the site. Access is through the city park and marina from Highway 30.
- F. Mining Activity: None on the subject property.
- II. POTENTIAL HAZARDOUS WASTE PROBLEMS:
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- **B.** Grazing/Logging Activities: None on site. At the west end of the property is a log yard recently developed on similar dredge fill material.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None

D. Commercial Activity/Occupancy: None

E. Unusual Seepage: None observed

F. Solid Waste: None

G. Unidentified piles of solids or any pools of liquids: None

H. Sick or dead wildlife or domestic animals: None

I. Unusual or noxious odors: None

J. Discolored or disturbed soil areas: None

K. Sewage or Septic Systems: The city wastewater treatment plant is located immediately south of the site and the outfall crosses the site. The plant is about 15 years old.

L. Petroleum Products (Oil/Gas storage facilities): The city park and marina operates USTs for fueling. An unresolved leaking UST is at the marina.

M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None

N. Transformers: None

O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: A potential for contamination from the leaking UST at he marina exists. No other evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal after confirming no contamination exists from the marina UST.

O-65.7, Rock Stockpile Goble Quarry, Rainier, Oregon

Completed by Michael Gross, 17 March 1995, revised 6 February 1997

Recommendations. No evidence of contamination potentially affecting the proposed use of the site. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Rainier under CERCLA.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are 23 active tanks in Rainier. Most sites are more than a mile from the site.
- 2. Oregon UST Cleanup List (17 Oct 96). There are nine unresolved underground storage tank removals in Rainier. One site is the Former James River mill on Highway 30 at the foot of the bridge to Longview.
- 3. <u>Oregon Environmental Cleanup Site Information System</u> (10 Sep 96). There are no sites in Rainier on the ECSI.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- A. Description: This site is a 73 acre former and active dredged material disposal site riverward of the railroad and immediately downstream of the Lewis and Clark (Longview) bridge in Rainier, Oregon. The site is a former disposal area, most of which was placed soon after the eruption of Mt. St. Helens in 1981-1983. No development has occurred on the site. The site is actively used for disposal and borrow and a narrow strip along the rear of the site is bermed with a weir, set up for receiving pipeline dredge material. The site has limited vegetation with some small trees, but the surface is mostly river sand. The site has been in use as a dredged material disposal site since before 1966. There is no other apparent land use or HTRW issues.
- **B. Structures:** No structures are on the site besides the temporary weir.
- C. Topography and Aspect: The site was originally part of the river. The original shore was at the south edge of the site at the railroad. During emergency dredging activity after the Mt. St. Helens eruption, the site was filled to its present state at about 20 feet MSL. The site is flat.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: There are no utilities on site other than local services the south side of the railroad.
- E. Access (roads, trails, other): There are no roads on the site. Access is across local at grade crossings over the railroad.
- F. Mining Activity: The property is currently mined for sand dredged fill material.

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- B. Grazing/Logging Activities: None on site.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Up to twenty year old trees are on the fringes of the site.
- D. Commercial Activity/Occupancy: Active mining of the area does not have include any equipment or facilities other than loaders.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None outside of areas which receive dredged material and are mined.
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination potentially affecting the proposed use of the site. Acquire rights for dredged material disposal without further investigation.

O-64.8, Industrial, Rainier, Oregon

Completed by Michael Gross, 17 March 1995, revised 6 February 1997

Recommendations. No evidence of contamination potentially affecting the proposed use of the site. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Rainier under CERCLA.
- B. Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are 23 active tanks in Rainier. Most sites are more than a mile from the site.
- 2. Oregon UST Cleanup List (17 Oct 96). There are nine unresolved underground storage tank removals in Rainier. One site is the Former James River mill on Highway 30 at the foot of the bridge to Longview.
- 3. Oregon Environmental Cleanup Site Information System (10 Sep 96). There are no sites in Rainier on the ECSI.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- A. Description: This site is a 56 acre former and active dredged material disposal site riverward of the railroad and one to two miles downstream of the Lewis and Clark (Longview) bridge in Rainier, Oregon. The site is mounded up to thirty feet high with dredged material and is being actively mined as well as receiving material. A bermed area was set up to receive material. A loader was engaged in loading material from another area. No development has occurred on the site. The site has limited vegetation, but there are large cottonwoods at the west end of the site where disposal as been minimized. The site has been in use as a dredged material disposal site since before 1966. The riverward area is used for bank fishing.
- B. Structures: No structures are on the site besides the temporary weir.
- C. Topography and Aspect: The site was originally part of the river and a sand bar, built up by dredged material disposal after Mt. St. Helens. The original shoreline at the west end is intact, but has been filled to about 5 feet above high water. There are 25 to 30 feet high mounds of material in the central and eastern portions of the site.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: There are no utilities on site other than local services the south side of the railroad.
- E. Access (roads, trails, other): There are no roads on the site. Access is across local at grade crossings over the railroad.
- F. Mining Activity: The property is currently mined for sand dredged fill material.

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- B. Grazing/Logging Activities: None on site.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Up to twenty year old trees are on the fringes of the site.
- **D.** Commercial Activity/Occupancy: Active mining of the area does not have include any equipment or facilities other than loaders.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None outside of areas which receive dredged material and are mined.
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination potentially affecting the proposed use of the site. Acquire rights for dredged material disposal without further investigation.

O-63.5, Lord Island, near Rainier, Oregon

Completed by Michael Gross, 17 March 1995, revised 6 February 1997

Recommendations. No evidence of contamination potentially affecting the proposed use of the site. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Rainier under CERCLA.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are 23 active tanks in Rainier. All sites are hydraulically disconnected from the site.
- 2. Oregon UST Cleanup List (17 Oct 96). There are nine unresolved UST removals in Rainier.
- 3. <u>Oregon Environmental Cleanup Site Information System</u> (10 Sep 96). There are no sites in Rainier on the ECSI.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA:

- **A. Description:** This site is a 39-acre area on the eastern tip of Lord Island. Lord Island is a bar island in the center of the Columbia River on the Oregon side of the main channel. The site has been used as a beach nourishment site is then past and a berm is established for that work around the south portion of the site. The island is heavily wooded with cottonwood riparian forest. The disposal site has forest on the fringes, but is mostly grass and scotch broom. No debris from flooding was noted on the site.
- B. Structures: No structures are on the site
- C. Topography and Aspect: The site was originally the submerged or lowland upriver point of a river bar island. The 300-acre island is oblong and relatively flat, about 10 feet MSL. Portions of the filled site are up to 25 feet MSL. The disposal area is rolling with low lying wetland and sparsely vegetated filled areas.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: There are no utilities on site.
- E. Access (roads, trails, other): There are no roads on the site. Access is by boat.
- F. Mining Activity: None on site.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None

- B. Grazing/Logging Activities: None on site.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- D. Commercial Activity/Occupancy: None on site.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None outside of former dredge material disposal areas.
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination potentially affecting the proposed use of the site. Acquire rights for dredged material disposal without further investigation.

W-63.5, Reynolds Metals, Longview Washington

Completed by Michael Gross, 17 March 1997, revised 4 February 1997

Recommendations. No evidence of contamination affecting the site for continued use as rehandle site. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 2 December 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated two sites in Longview. The closed Longview Fibre Landfill is approximately 2 miles east of the site. The monitoring is being overseen by Ecology. The Weyerhaeuser site is about one mile east of the site.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. In Longview, there are 136 operational underground storage tanks. Approximately 40 tanks are within 2 miles of the site.
- 2. Washington LUST List. There are 62 tanks in Longview either awaiting cleanup or with cleanup started. Fifteen are within two miles of the site. One is on the Reynolds Metals property (#2758). Cleanups started in 1991, but final documentation has not been approved. The site is not near the disposal site. Fibre site awaiting cleanup.
- 3. <u>Washington Confirmed and Suspected Contaminated Sites List.</u> In Longview there are 13 sites with known contamination. Those nearest to the site are as follows:
- ♦ Cowlitz County SLF (1079). Northeast of the site, an active landfill that is monitoring for groundwater contamination. Hydraulically separated from this site by the log pond.
- ♦ International Paper Sites (1080/1081). The International Paper property is 500 yards north of the rehandle site and has confirmed soil and groundwater contamination for phenols and PAHs. The site is being investigated under state RCRA.
- ♦ Longview Switching Co. (1099). This site has confirmed POL contamination in soil.
- ♦ Chevron USA (1101). This site has confirmed groundwater contamination but is about one mile downstream from the site.
- ◆ Longview Fibre (31). This site has a closed paper waste landfill with confirmed metals contamination in groundwater.

Other sites are within two miles of the site.

4. <u>Hazardous Sites List.</u> Chevron USA, Gardner Forest Products, Ostrander Rock Disposal, West Coast Mobile Oil, Longview Fibre, Weyerhaeuser, and Reynolds Metals are all sites in Cowlitz County on the list. These sites are in remedial action or awaiting RA. The Reynolds site includes several facilities closed under RCRA. Reynolds has an old potliner disposal area landward of the levee near the W-63.5 site. According to Ray Walker, Reynolds (360-636-8262), the potliner has been removed, and Reynolds is currently collecting and treating ditch water and monitoring groundwater. Cyanide and Fluoride are the main contaminants of concern. Use of the W-63.5 site does not affect or is affected by this contaminant issue. Reynolds has a closed "black mud" pond at the west end of the site adjacent to the Radakovich property at Mt. Solo. This site was a lined disposal area constructed in 1972 and closed in 1991 to receive carbon, alumina, cryolite and underflow solids from air scrubber systems. The site was closed under interim status under RCRA. The groundwater is monitored for cyanide and fluoride. No off site migration to the west has been documented. A Sweet Edwards report indicated that the contamination does not go beyond the ditch to the west.

Hazardous Materials Field Examination. Date of inspection 11 March 1996

I. GENERAL PHYSICAL DATA:

- A. Description: This site is a currently used dredged material management area outside the levee on Reynolds property. According to aerial photos, it began usage around 1970 for dredged material. It was used as a borrow site for landfill and cryolite pond cover material and other construction projects on the facility. The site has a weir structure for return water and can hold about 500,00 cubic yards of material. Currently it is about half full and ready to receive more material. Immediately landward is the levee and then a potliner disposal area covered and closed. According to Reynolds, anything outside the levee is not contaminated, and disposal does not affect contaminant concerns within the levee. Aerial photos indicate burning in the landward potliner site in 1966. The site began use as a disposal area in about 1970, was in use or borrowed throughout the 70s (borrow in 1979). In 1983, the potliner landfill was open and the disposal site inactive. In 1991 material was being used to cap the cryolite ponds at the west end of Reynolds property.
- **B. Structures:** On the immediate site, there are no structures other than the weir. Railroad spurs, buildings and plant for the Reynolds aluminum reduction facility are to the immediate north. The site is under RRA permit for potliner and other waste.
- C. Topography and Aspect: The site is flat, draining to the south and the river. The levee surrounds the site to a height of about 30 feet MSL with the riverward levee permanent. The site itself is about 10 feet MSL, as is the Reynolds property except where filled.
- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** High voltage powerlines serve the Reynolds facility. Fire and other water and sewer are on the plant site.
- E. Access (roads, trails, other): Access is from the Reynolds property on Ocean Beach Highway through restricted plant property.
- **F.** Mining Activity: The sand material dredged from the river is placed in the site. It is mined for use as fill on the Reynolds property and marketed to Ostrander Rock, a quarry, for off site use.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: No containers were observed on the disposal site. Bulk waste storage containers were seen on the plant property.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None.
- **D.** Commercial Activity/Occupancy: The site has been occupied by the aluminum reduction facility since the early 1960s. Activities at the facility are not expected to affect the disposal site.
- E. Unusual Seepage: None observed.
- **F. Solid Waste:** Potliner waste is no longer managed on site. A closed disposal site for potliner north of the dredge material site was removed in the 1980s.

- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: The site is used for fill and borrow.
- **K.** Sewage or Septic Systems: None at the disposal site. The facility has storm and sanitary sewer.
- L. Petroleum Products (Oil/Gas storage facilities): A closed underground storage tank that leaked on the plant facility is being cleaned up by the Reynolds facility. It is not close tot he disposal area.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: Plant electrical substation is not near the disposal site.
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: The disposal site has minimal potential for contamination from past potliner use. This is well documented in facility RCRA files. The disposal site is currently planned for continued use as a fill and borrow site under the same ownership. The site use should be continued without further investigation based on these findings. The site itself has no HTRW issues as long as it is not expanded.

W-62.0, Mt. Solo, Longview Washington

Completed by Michael Gross, 17 March 1995, revised 5 February 1997

Recommendations. Disposal of material has the potential to mound groundwater and drive contaminants toward Reynolds property. Recommend investigation of severity of this potential. Recommend separate discharge of return water rather than using drainage district canal.

Regulatory Records. Date(s) of records search 2 December 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated two sites in Longview. The closed Longview Fibre Landfill and the Weyerhaeuser sites are 4 miles upstream of the site.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. In Longview, there are 136 operational underground storage tanks. Approximately 20 tanks are within 2 miles of the site.
- 2. Washington LUST List. There are 62 tanks in Longview either awaiting cleanup or with cleanup started. Ten are within two miles of the site. One is the Consolidated Diking District (#152) on site at the pump station. Cleanups started in 1994, but final documentation has not been approved.
- 3. Washington Confirmed and Suspected Contaminated Sites List. In Longview, there are 13 sites with known contamination. Those nearest to the site include the Ostrander Rock Disposal (1084) site, which is across the highway and up the hill. It has confirmed phenol soil contamination. Other sites are within four miles of the site.
- 4. Hazardous Sites List. Chevron USA, Gardner Forest Products, Ostrander Rock Disposal, West Coast Mobile Oil, Longview Fibre, Weyerhaeuser, and Reynolds Metals are all sites in Cowlitz County on the list. These sites are in remedial action or awaiting RA. The Reynolds site includes several facilities closed under RCRA. Reynolds has an old potliner disposal area landward of the levee near the W-63.5 site. According to Ray Walker, Reynolds (360-636-8262), the potliner has been removed, and Reynolds is currently collecting and treating ditch water and monitoring groundwater. Cyanide and fluoride are the main contaminants of concern. Use of the W-63.5 site does not affect or is affected by this contaminant issue. Reynolds has a closed "black mud" pond at the west end of the site adjacent to the Radakovich property at Mt. Solo. This site was a lined disposal area constructed in 1972 and closed in 1991 to receive carbon, alumina, cryolite and underflow solids from air scrubber systems. The site was closed under interim status under RCRA. The groundwater is monitored for cyanide and fluoride. No off site migration to the west has been documented. A Sweet Edwards report indicated that the contamination does not go beyond the ditch to the west. The Mt. Solo Landfill, immediately north of the site, was removed from the Hazardous Sites List. The site is a closed solid waste landfill that is undergoing groundwater monitoring and leachate collection. According to Chris Matthews, Ecology Solid Waste, SWR (6 Dec 96) the landfill is a closed facility, no liner, closed under MFS in 1991. The owner is in post closure monitoring including groundwater and surface water. There are no apparent major contaminant issues or groundwater resources. The landfill will be in post-closure monitoring for another 15 years. The site received mill waste from Weyerhaeuser including clarifier solids which are heavy in organic waste with high BOD, pH, with surface water the primary concern. Hydrofilling near the levee, discharging up-gradient of the pump station would not likely cause a surface water concern at Mt. Solo.

Hazardous Materials Field Examination. Date of inspection 11 March 1996

I. GENERAL PHYSICAL DATA:

- A. Description: This site is a low-lying area currently used for grazing cattle. Portions of the site are wetlands. The east border of the site is a diking district canal and pump station beyond which is the Reynolds property and the closed cryolite pond. No monitor wells are on the Radakovich property. Four large BPA towers are on the southwest site corner. To the north beyond the natural drainage channel lies the Mt. Solo landfill. This is a municipal solid waste landfill operated between about 1974 and 1991. The site is closed under Washington minimal functional standards and being monitored. The waterway is monitored and potentially contaminated by both landfill and cryolite pond leachate. Recommend not discharging directly to waterway, but setting up pumps separate from the waterway or discharging to waterway immediately upstream of pumps.
- **B. Structures:** Four large high voltage electrical towers are on site near the southwest corner. Also immediately south and west of the site is a pump station for the local drainage district. A leveed canal is immediately east of the site. A levee borders the site to the south at the Columbia River.
- C. Topography and Aspect: The site is flat, draining to the south and the river as well as tot he north and the interior natural drainage at the landfill border. The disposal site is the southern half, a east west tending area approximately 75 acres in size. The total site size is about 150 acres. The Columbia River levee borders the site tot he south to a height of about 30 feet MSL. The site itself is about 10 feet MSL.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: High voltage powerlines cross the site north to south at the east end. Four large towers are on the site.
- E. Access (roads, trails, other): Access is from the Radakovich property near the landfill. A dirt road crosses the site to the pump station and levee.
- F. Mining Activity: None on site. A rock quarry is across the highway and up the hill.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: No containers were observed on the site.
- B. Grazing/Logging Activities: About 20 head of beef cattle are grazed on site.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Vegetation is damaged from cattle grazing.
- **D.** Commercial Activity/Occupancy: None on site. The adjacent aluminum facility has been in operation since the 1960s. The cryolite pond was constructed in 1972 and closed in 1991. The Mt. Solo Landfill was opened in 1974 and closed in 1991.
- E. Unusual Seepage: None observed. Both facilities are monitored for leachate and groundwater contamination.

- **F. Solid Waste:** Cryolite, carbon, PAHs and air scrubber sludges were disposed in the aluminum facility disposal unit. The groundwater and leachate is monitored for cyanide and fluoride. The solid waste landfill at Mt. Solo received Weyerhaeuser clarifier solids which are high in organic material, pH, and BOD.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None observed.
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None at the disposal site.
- L. Petroleum Products (Oil/Gas storage facilities): The Consolidated Diking District (#152) closed an underground storage tank on site at the pump station. Cleanup started in 1994, but final documentation has not been approved.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None on site.
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: The disposal site has minimal potential for contamination. Adjacent sites have known surface water and groundwater contamination, which is monitored. Disposal of material has the potential to mound groundwater and drive contamination under the sites. This is not a concern of regulators or adjacent property owners. Groundwater resources are not expected to be impacted. Groundwater should be monitored prior to and during disposal at the site. Existing reports should be evaluated and owners further consulted. Return water should be separate from diking district drainage and canals to avoid pumping additional contaminated water into the river.

W-59.7, Hump Island, near Longview Washington

Completed by Michael Gross, 17 March 1995, revised 4 February 1997

Recommendations. No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 2 December 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated several sites in Longview. All sites are upstream and separate from Hump Island by the channel.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. In Longview, there are 164 active underground storage tanks or unresolved tank problem sites. None are near the site.
- 2. <u>Washington LUST List</u>. There are 35 tanks in Longview either awaiting cleanup or with cleanup started. All are hydraulically separated from Hump Island.
- 3. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. In Longview there are 35 sites with known contamination. All are hydraulically separated from Hump Island.

Hazardous Materials Field Examination. Date of inspection 11 March 1996

- A. Description: This site is a river bar island located in the center of the Columbia River eight miles downstream of the mouth of the Cowlitz River near Longview, Washington. The site is on the Washington side of the shipping channel. The island was originally a sand bar, but is now covered by up to 20 feet of dredged fill, placed there during maintenance dredging and after the eruption of Mt. St. Helens in the early 1980s. This material is sparsely vegetated with grasses and scotch broom. The few areas not covered by dredged material have wetlands and riparian forest. These areas are at the north side of the site. The main channel side of the island has steep eroded banks of sand. The island is approximately 90 acres in a long narrow bar almost 2 miles long. Almost all of the site is proposed for additional dredged fill material.
- **B.** Structures: No structures are on the island.
- C. Topography and Aspect: The island is naturally at or below sea level. Dredge filling has raised the site to about 20 feet MSL. The island is long and narrow, about 200 yards wide and 2 miles long, running roughly east to west.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site.
- E. Access (roads, trails, other): There are no roads on the site. Access is by boat.
- F. Mining Activity: None on the subject property.
- II. POTENTIAL HAZARDOUS WASTE PROBLEMS:
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: No containers were found.

- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed
- F. Solid Waste: Some floating debris was noted on the beach.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

O-57.0, Crims Island Beach Nourishment, near Rainier, Oregon Completed by Michael Gross, 17 March 1995, revised 6 February 1997

Recommendations. No evidence of contamination potentially affecting the proposed use of the site. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Rainier under CERCLA.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are 23 active tanks in Rainier. All sites are hydraulically disconnected from the site.
- 2. <u>Oregon UST Cleanup List</u> (17 Oct 96). There are nine unresolved underground storage tank removals in Rainier.
- 3. Oregon Environmental Cleanup Site Information System (10 Sep 96). There are no sites in Rainier on the ECSI. A drum was removed from Crims Island that had floated to the site on flood water in 1995. No residual contamination remains.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of Inspection 8 December 1995

- A. Description: This site is a 51-acre area on the eastern tip of Crims Island. Crims Island is a bar island in the center of the Columbia River on the Oregon side of the main channel nine miles downstream from Rainier. The site has been used as a beach nourishment site in then past. The island is heavily wooded with cottonwood riparian forest with some meadows. The open areas have been used in the past and may be used for hybrid cottonwood production. The disposal site has forest on the fringes, but is mostly grass, scotch broom, and open beach. No debris from flooding was noted on the site.
- **B.** Structures: Three small wooden structures that appear to be hunting blinds were seen on the site.
- C. Topography and Aspect: The site was originally the submerged or lowland upriver point of a river bar island. The 300-acre island is oblong and relatively flat, about 10 feet MSL. Portions of the filled site are up to 20 feet MSL. The disposal area is relatively flat on the northeast shore of the island.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: There are no utilities on site.
- E. Access (roads, trails, other): There are no roads on the site. Access is by boat.
- F. Mining Activity: None on site.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None
- **B.** Grazing/Logging Activities: None on site. The island has been used for grazing, but no longer used.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None
- D. Commercial Activity/Occupancy: None on site.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None outside of former dredge material disposal areas.
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination potentially affecting the proposed use of the site. Acquire rights for dredged material disposal without further investigation.

REACH 5 SITES

O-54, Port Westward, near Clatskanie, Oregon Completed by Michael Gross, 17 March 1995, revised 6 February 1997

Recommendations. Potential for petroleum contamination in areas. Port should define contamination prior to using site for dredged material disposal.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Rainier or Clatskanie under CERCLA.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are 42 active tanks in Clatskanie and Westport area (zip code 97016). Two tanks are on the Beaver PGE power generation plant.
- 2. Oregon UST Cleanup List (17 Oct 96). There are five unresolved underground storage tank removals in zip code 97016. Two tanks are on the Beaver plant site (05-94-0210, 05-94-0211).
- 3. Oregon Environmental Cleanup Site Information System (10 Sep 96). There are four sites in Clatskanie ECSI. One is a floating drum removed from Crims Island in 1995. One is at the Beaver Lumber Co. (1866) in Clatskanie, and one is the Clatskanie Disposal site on Hall Road (933). The Hall Road disposal site is up the hill southwest of Clatskanie and not close to any of the sites in this reach.
- 4. <u>Confirmed Release List</u> (28 Jan 97). The James River Wauna Mill is on the confirmed release list.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA:

A. Description: This site is on the location of the former Beaver Army Terminal used as an ammunition outloading facility from 1942 to 1947 with facilities capable of shipping ordnance by rail and water. The site was inactivated in 1964. A total of 875 acres was acquired by the Army, some of which is outside the current Port Westward site. Buildings currently at the entrance to the site at the southeast corner off the Beaver levee access road were constructed by the Army. An extensive file on potential HTRW from Army activity on the site exists in Corps files. The file documents several interviews with former Army personnel and current owners or those involved in the property transfer from GSA. The interviews indicate the site was swept for ordnance when the army left the site. The location of the ammunition storage bunkers is in the center of the site and is now the site of the PGE oil fired power generation facility. PGE had never found any ordnance on the site. The site contains a railroad loop to a pier constructed by the Army. The pier is used for offloading petroleum for the PGE plant. An above ground pipeline from the pier runs to the plant. The line appeared in excellent condition and no spills were visible. Nine large above-ground storage tanks for fuel storage are visible on aerial photos. Nine underground storage tanks were constructed on the site by the Army. Seven were removed in 1993 by the Corps. Minor groundwater contamination was found in excavations which was determined not associated with the Army tanks. This was found in the area southeast and outside the Port Westward site in the

administration area of the Army terminal. It is not known if PGE has investigated the problem. The Army proposes not to investigate. Two underground storage tanks remain in use by PGE and are in the area of the former Army buildings. On the site visit, the area surrounding the plant is in agricultural use, either grazing (south) or hybrid cottonwoods for paper production (west, harvested). The area southeast, north and east of the plant is proposed for edge fill. Interior drainage ditches appear contaminated with organics from agricultural uses. A red brown stain was noted on vegetation in the ditches suggesting tannin and iron bacteria present. No buildings were noted outside the PGE plant boundary. There is one building north of the plant, and one barn southeast of the plant. Both are in proposed fill areas. Aerial photographs were reviewed as follows:

1991 – PGE plant is surrounded by cottonwoods.

1989 - Cottonwoods are younger, no vegetation in interior of barricaded set-out track.

1983 – Appears similar to 1989.

1979 – Land appears to be used for pasture.

1977 - Northeast corner of site has been recently filled between levee and river.

1973 – PGE plant under construction, areas north and northeast at river are being filled. Grading in former ammunition igloo area and in interior to set-out track.

1968 - Igloos intact, northeast area unfilled, riparian area. Rail yard used for storage.

1961 – Army terminal active, Bradbury Slough full of barges and ships along piers, rail yard full of equipment.

1957 – Similar to 1961.

- **B.** Structures: The disposal sites consist of two 200-acre parcels. Port Westward 1, north and east of the PGE plat runs from the pipeline on the west, north to the river, east to the Bradbury Slough levee and to the southeast entrance to the plant. One building is in this area, but it is riverward of the levee crest. Port Westward 2 is southeast of the plant, but includes only on barn. The old railroad spur for the barricaded set-out track is within this area, but all tracks, ties and barricades are removed. Some low fences and cyclone fences are on the sites.
- C. Topography and Aspect: The site is originally on floodplain silt deposits on the Columbia River just downstream of Crims Island in Oregon. The site is within the Beaver drainage district, with the levee on the north and east sides. Dredging of the Bradbury Slough during Army occupation filled large areas on the east and north side to the top of the levee. Remnants of piers for munition barges are in the slough. All rails are removed from the railyard at the east side. The PGE plant is on original low topography at about 10 feet MSL. The levee rises to about 25 feet MSL.
- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** A large substation on the east side of the PGE plant leads to high voltage overhead lines to the southeast. A large insulated oil pipeline runs from the ship pier in the channel to the tank farm in the northwest portion of the plant. Local electrical and telephone serve the area south of the plant. The plant is served by surface water treatment facility on Bradbury Slough at the southeast corner of the site.
- **E.** Access (roads, trails, other): Access is from Beaver Dike access road west from Clatskanie. The paved road enters the site at the southeast and encircles the plant as a dirt road except at the plant entrance.
- F. Mining Activity: None on site.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The PGE facilities has storage and secondary containment for hundreds of thousands of gallons of oil in above ground tanks. The disposal sites themselves are open space and fields, and no containers were seen.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Some discolored vegetation in the drainage ditches appeared to be from some bacteria in the water.
- **D.** Commercial Activity/Occupancy: The PGE plant is directly adjacent to the two disposal areas.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None outside of farm building sites.
- K. Sewage or Septic Systems: The facility treat its own wastewater.
- L. Petroleum Products (Oil/Gas storage facilities): Hundreds of thousands of gallons of fuel oil for the power generating plant are on site. Two unresolved underground storage tank problems are on that site.
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): Potential for pesticides from agricultural use of the disposal sites. Sites are used for hybrid cottonwood crops.
- N. Transformers: Large transformers are in the substation at the power plant.
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: Potential for contamination from possible pesticides at the cottonwood fields, also petroleum contamination potential in the drainage system and the unresolved underground storage tank closures. Recommend Port of St. Helens (owner) quantify any petroleum contamination and agricultural chemical use prior to placing dredged material.

W-46.3, Brown Island, across from Westport, Oregon

Completed by Michael Gross, 17 March 1995, revised 7 February 1997

Recommendations. No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 2 December 1996

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Wahkiakum County, Washington.
- B. Oregon Department of Environmental Quality: Not applicable.
- C. Washington Department of Ecology: 1. Washington UST List. There are 11 active underground storage tanks in Cathlamet. None are near the site.
- 2. <u>Washington LUST List</u>. There are 5 tanks in Cathlamet either awaiting cleanup or with cleanup started. All are hydraulically separated from Whites Island.
- 3. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. There are no sites in Wahkiakum County with known contamination.

Hazardous Materials Field Examination. Date of inspection 11 March 1996

- A. Description: This site is a combination of two beach nourishment sites on the eastern tip of the island that was last used in 1995. The site is a low lying upland with minimal vegetation in the former disposal sites. Upland and riparian forest and wetland dominate the island outside the disposal site boundaries. The site was viewed from the shore and was not visited. HTRW issues are unlikely. Aerials indicate dredge disposal on the site since late 1960s that created upland from shallow water. Active pipeline dredging appears in 1979 photos.
- B. Structures: No structures are on the island.
- C. Topography and Aspect: The island is naturally at or a few feet above sea level. Dredge filling has raised the disposal site to about 20 feet MSL. The site is long and narrow, forming the upstream end of a number of channel islands, the largest of which is Puget Island. The site runs roughly east to west.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No powerlines are on site.
- E. Access (roads, trails, other): There are no roads on the site. Access is by boat.
- F. Mining Activity: None on the subject property.
- II. POTENTIAL HAZARDOUS WASTE PROBLEMS:
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The site was not visited.

- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed.
- D. Commercial Activity/Occupancy: None
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None

CONCLUSIONS AND RECOMMENDATIONS: No evidence of contamination affecting the site or projected use. Acquire rights for dredged material disposal without further investigation.

O-42.9, James River, Wauna Mill near Westport, Oregon Completed by Michael Gross, 17 March 1995, revised 10 February 1997

Recommendations. Potential for contamination from sludge application affecting disposal activities. Acquire rights for dredged material disposal after review of sludge application process and limited investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- **A. Environmental Protection Agency:** <u>USEPA CERCLIS/NPL</u>. EPA has evaluated no sites in Clatskanie or Westport under CERCLA.
- B. Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are three active tanks in Westport. None are near the proposed disposal site. The Wauna Mill tank has been decommissioned.
- 2. <u>Oregon UST Cleanup List</u> (17 Oct 96). There is one unresolved underground storage tank removal in Westport. It is more than three miles from the site.
- 3. Oregon Environmental Cleanup Site Information System (10 Sep 96). There are four sites in Clatskanie ECSI. One is a floating drum removed from Crims Island in 1995. One is at the Beaver Lumber Co. (1866) in Clatskanie, and one is the Clatskanie disposal site on Hall Road (933). The Hall Road site is up the hill southwest of Clatskanie and not close to any of the sites in this reach.
- 4. Confirmed Release List (28 Jan 97). The James River Wauna Mill is on the Confirmed Release List (649). The site is an active paper mill with confirmed arsenic, chromium, cPAH, chrysene, dioxin, furan and pentachlorophenol soil contamination. According to Steve Fortuna (ODEQ, 229-5166), contamination is associated with past wood treatment activities up the hill from the railroad tracks and is located in a half mile long stretch downstream of the mill near RM 40.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- A. Description: This 53 acre former dredged material disposal site is located on the Oregon shore just west of Westport, Oregon, and about one half mile upstream from the main facility at the paper mill. The site is located on silt flood plain deposits but is built up with dredged material and a levee to about 25 feet MSL. The site is currently being revegetated in many places using sludge from the existing paper manufacturing facility. Torres Sorrenson of James River Corp. (455-2221) indicated sludge has been applied to the dredged material experimentally, tilled in and seeded. A portion of the site has recently received dredged material and another portion was vegetated with grass. According to Mr. Sorrenson the chemistry on the sludge has low levels of metals, below that allowed for application of municipal sludge on agricultural lands. Mr. Sorrenson indicated the site could be used for dredge fill even on top of the restored site. Flagging and stakes of unknown purpose are throughout the site which is lush grassland. The site is surrounded by riparian forest. The site has been used for dredged material since the 1960s.
- B. Structures: No structures are on site.

- C. Topography and Aspect: The site was originally flood plain at the mouth of the Westport slough. The site is built up with dredged material to about 25 feet above the river. The site is oblong and peanut shaped, tending roughly east to west.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: Power and pipelines cross the river one mile downstream of the site.
- E. Access (roads, trails, other): Access is from Highway 30 through a locked gate and across the main Portland-Astoria railroad line on a gravel road.
- F. Mining Activity: None on site.
- II. POTENTIAL HAZARDOUS WASTE PROBLEMS:
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: None on site.
- B. Grazing/Logging Activities: None on site.
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: Where the sludge has been used as a soil amendment, grass is thick and lush. The recently filled portion is bare sand.
- **D.** Commercial Activity/Occupancy: The James River Mill has used the site for experimental restoration of dredged fill material. The plant has had no other operations on site.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: See above discussion on soil appearance.
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: Local service pole mounted transformers at perimeter of site.
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal with review of sludge management documentation.

REACH 6 SITES

O-38.3, Tenasillahe Island, Clatsop County, Oregon Completed by Michael Gross, 17 March 1995, revised 11 February 1997

Recommendations. No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated three sites in Clatsop County under CERCLA. None are near the site.
- B. Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are no tanks near the proposed disposal site.
- 2. <u>Oregon UST Cleanup List</u> (17 Oct 96). There are no unresolved underground storage tank concerns within three miles of the site.
- 3. Oregon Environmental Cleanup Site Information System (10 Sep 96). There are no sites within five miles on the ECSI.
- 4. <u>Confirmed Release List</u> (28 Jan 97). The James River Wauna Mill, four miles upstream from the site, is on the confirmed release list. James River has soil contamination and is hydraulically disconnected from the site.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- **A. Description:** This 44-acre active beach nourishment site is on located on a small unnamed island in Oregon immediately upstream of Tenasillahe Island. The river at this point is characterized by steep canyon walls with some flood plain and a braided channel with numerous channel islands. The site is a low lying bar island with some cottonwood forest. The riverward portion has been built up with dredged material to about 25 feet MSL. The island is isolated and immediately upstream of the Columbia White Tailed Deer National Wildlife Refuge. It has no use other than a dredged material disposal site, which has occurred since the 1960s.
- B. Structures: No structures on site.
- C. Topography and Aspect: The site was originally a shallow water or low lying island of approximately 100 acres. The east bank has been raised to about 25 feet MSL by dredged material.
- **D. Powerlines, Telephone/Telegraph Lines, Pipelines:** No major river crossings of utilities are at this site. Several are within a mile upstream of the site.
- E. Access (roads, trails, other): There are no roads on site. Access is by boat.
- F. Mining Activity: None on site.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The site was not visited.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed.
- D. Commercial Activity/Occupancy: None on site.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.

O-34.0, Welch Island, Clatsop County, Oregon

Completed by Michael Gross, 17 March 1995, revised 11 February 1997

Recommendations. No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated three sites in Clatsop County under CERCLA. None are near the site.
- B. Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are no tanks near the proposed disposal site.
- 2. <u>Oregon UST Cleanup List</u> (17 Oct 96). There are no unresolved underground storage tank concerns within three miles of the site.
- 3. <u>Oregon Environmental Cleanup Site Information System</u> (10 Sep 96). There are no sites within five miles on the ECSI.
- 4. <u>Confirmed Release List</u> (28 Jan 97). The James River Wauna Mill, six miles upstream from the site, is on the confirmed release list. James River has soil contamination and is hydraulically disconnected from the site.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- **A. Description:** This 42-acre former beach nourishment site is on located on the northeast shore of Welch Island, a large, low lying channel island in the Lewis and Clark National Wildlife Refuge on the Columbia River. The site is about 20 river miles upstream from Astoria, Oregon. The river at this point is characterized by steep canyon walls with some flood plain and a braided channel with numerous channel islands. The site is a low lying bar island with cottonwood forest. The northeast shore was originally shallow water but has been built up with dredged material to about 25 feet MSL. The island is isolated and one of many islands in the National Wildlife Refuge. It has no use other than a dredged material disposal site, which has occurred since the 1960s.
- B. Structures: No structures on site.
- C. Topography and Aspect: The site was originally a shallow water on the shore of the island. The east bank has been raised to about 25 feet MSL by dredged material.
- **D.** Powerlines, Telephone/Telegraph Lines, Pipelines: No major river crossings of utilities are at this site. Several are within a mile upstream of the site.
- E. Access (roads, trails, other): There are no roads on site. Access is by boat.
- F. Mining Activity: None on site.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The site was not visited.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed.
- D. Commercial Activity/Occupancy: None on site.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.

W-33.4, Skamokawa Park, Wahkiakum County, Washington Completed by Michael Gross, 17 March 1995, revised 11 February 1997

Recommendations. No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. There are no sites in Wahkiakum County in CERCLIS.
- B. Oregon Department of Environmental Quality: Not applicable
- C. Washington Department of Ecology: 1. Washington UST List. There are no active underground storage tanks in Skamokawa.
- 2. <u>Washington LUST List</u>. There are no unresolved underground storage tank concerns within three miles of the site.
- 3. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. There are no site in Skamokawa with known contamination.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

I. GENERAL PHYSICAL DATA:

- A. Description: This is a city park that is an active maintenance dredging disposal site. Dredged material is placed on the public beach at the Skamokawa Park. The site has recently been filled and appears to be actively being used for borrow. The park consists of landscaped play areas, parking and facilities for trailer camping. Aerials indicate dredge disposal on the site over the past 15 years. The site is at the mouth of a creek draining through the town of Skamokawa.
- B. Structures: No structures on the disposal site. The park contains restroom facilities.
- C. Topography and Aspect: The site was originally a shallow water and has been built up to a beach through beach nourishment dredged material disposal. The creek drainage is a steeply walled canyon within the coast range.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: No major river crossings of utilities are at this site. No powerlines are on site.
- E. Access (roads, trails, other): Access is from State Route 4 in Skamokawa. Paved parking is on site.
- F. Mining Activity: The site is an active dredged sand disposal and borrow site.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The site was not visited.

- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed.
- D. Commercial Activity/Occupancy: None on site.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): Potential from park activities, but not on the active disposal site.
- N. Transformers: None
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.

REACH 7 SITES

O-27.2, Pillar Rock Island, Clatsop County, Oregon Completed by Michael Gross, 17 March 1995, revised 11 February 1997

Recommendations. No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated three sites in Clatsop County under CERCLA. None are near the site.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are no tanks near the proposed disposal site.
- 2. <u>Oregon UST Cleanup List</u> (17 Oct 96). There are no unresolved underground storage tank concerns within three miles of the site.
- 3. Oregon Environmental Cleanup Site Information System (10 Sep 96). There are no sites within five miles on the ECSI.
- 4. <u>Confirmed Release List</u> (28 Jan 97). There are no sites within ten miles of the site on the confirmed release list.
- C. Washington Department of Ecology: Not applicable.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- **A. Description:** This 57-acre site is an approved beach nourishment site in Oregon waters within the Lewis and Clark National Wildlife Refuge. The site is located adjacent to the channel and is oblong, approximately a mile long. It was developed with pile dikes and has been used for dredged material disposal. Most of the site has recently been filled by dredging, but some areas are vegetated with riparian forest. There are no structures besides pile dikes or apparent HTRW issues associated with this site.
- B. Structures: Pile dike beneath the sand fill material.
- C. Topography and Aspect: The site was originally shallow water. The creation of the pile dike and dredge filling began in the 1960s. The site is now well above MSL. The site is oblong and narrow, about one mile long.
- D. Powerlines, Telephone/Telegraph Lines, Pipelines: None
- E. Access (roads, trails, other): There are no roads on site. Access is by boat.
- F. Mining Activity: None on site.

II. POTENTIAL HAZARDOUS WASTE PROBLEMS:

- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The site was not visited. None anticipated.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed.
- D. Commercial Activity/Occupancy: None on site.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.

W-21.0, Rice Island, Clatsop County, Oregon, and Wahkiakum County, Washington Completed by Michael Gross, 17 March 1995, revised 11 February 1997

Recommendations. No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.

Regulatory Records. Date(s) of records search 6 February 1997

- A. Environmental Protection Agency: <u>USEPA CERCLIS/NPL</u>. EPA has evaluated three sites in Clatsop County under CERCLA. None are near the site. There are no sites in Wahkiakum County on CERCLIS.
- **B.** Oregon Department of Environmental Quality: 1. Oregon UST List (16 Jan 97). There are no tanks near the proposed disposal site.
- 2. <u>Oregon UST Cleanup List</u> (17 Oct 96). There are no unresolved underground storage tank concerns within three miles of the site.
- 3. <u>Oregon Environmental Cleanup Site Information System</u> (10 Sep 96). There are several sites near Tongue Point within five miles downstream on the ECSI.
- 4. <u>Confirmed Release List</u> (28 Jan 97). The Tongue Point Landfill, a closed facility at the former Tongue Point Naval Air Station has confirmed releases to the near shore sediment and surface water. The site is four miles downstream of the site.
- C. Washington Department of Ecology: 1. Washington UST List. There are no active underground storage tanks within 5 miles of the site.
- 2. <u>Washington LUST List</u>. There are no tanks awaiting or undergoing cleanup within 5 miles of the site.
- 3. <u>Washington Confirmed and Suspected Contaminated Sites List</u>. There are no sites in within 5 miles of the site with known contamination.

Hazardous Materials Field Examination. Date of inspection 8 December 1995

- A. Description: This 228-acre site is a channel island almost devoid of vegetation due to past dredged sand disposal. The site is on the Washington side of the shipping channel, and spans two states within the Lewis and Clark National Wildlife Refuge, three to four mile upstream from Tongue Point near Astoria, Oregon. The river has widened into the estuary and this site is toward the north side of the wide estuary. The site is undeveloped, but berms and weirs in serial photography indicate recent dredged disposal. There are no apparent HTRW issues at the site.
- B. Structures: Temporary weirs for return water control.
- C. Topography and Aspect: The site was originally shallow water, and has been filled with dredged sand to about 10-15 feet MSL. The site is a curving oblong, following parallel to the shipping channel for about one mile.

- D. Powerlines, Telephone/Telegraph Lines, Pipelines: None
- E. Access (roads, trails, other): There are no roads on site. Access is by boat.
- F. Mining Activity: None on site.
- II. POTENTIAL HAZARDOUS WASTE PROBLEMS:
- A. Drums, cylinders, canisters, sacks of unknown content, or which have hazardous material placards or symbols: The site was not visited. None anticipated.
- B. Grazing/Logging Activities: None
- C. Unusual lack of vegetation, dead, discolored, or stressed vegetation: None observed.
- D. Commercial Activity/Occupancy: None on site.
- E. Unusual Seepage: None observed.
- F. Solid Waste: None observed.
- G. Unidentified piles of solids or any pools of liquids: None
- H. Sick or dead wildlife or domestic animals: None
- I. Unusual or noxious odors: None
- J. Discolored or disturbed soil areas: None
- K. Sewage or Septic Systems: None
- L. Petroleum Products (Oil/Gas storage facilities): None
- M. Agricultural Chemicals (Pesticides, Herbicides, Fungicides, Fertilizers, etc.): None
- N. Transformers: None
- O. Batteries: None observed.

CONCLUSIONS AND RECOMMENDATIONS: No potential for contamination affecting disposal activities. Acquire rights for dredged material disposal without further investigation.